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NAVAL POSTGRADUATE SCHOOL

Monterey, California



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THESIS

TRIAD OR DYAD FOR THE 1990s:
A BALANCE OF REALITY

by

Tommy David Klepper

June, 1990

Thesis Advisor:
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Triad or Dyad for the 1990s:
A Balance of Reality

by

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of the requirements for the degree of

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ABSTRACT

As the United States enters the decade of the 1990s, it is essential to review the guidance and policies for our force structures. At the focal point of discussion on future force structures for the United States is the strategic nuclear forces. The strategic nuclear force structure for the United States has been predicated on the concept of a Triad, which consists of three legs, referred to as land-based, sea-based, and manned bombers. Each of the legs consists of separate components. Understanding the tradition of the United States strategic deterrent being predicated on the Triad concept, it is concluded that with the changing international environment and the declaratory statements for continuing to decrease the Defense Budget, a new and realistic review of the factors for determining a strategic nuclear force should be researched. Therefore, the intention of this thesis is to review and analyze the five factors which may contribute to the formulation of a realistic policy for the 1990s with regard to United States strategic nuclear forces. The final results of the research have indicated sufficient evidence that a policy review of the strategic nuclear Triad should be conducted to meet the challenges and realities of the 1990s and the 21st Century.

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I. INTRODUCTION

An unrelenting dilemma of the 1990s and the 21st Century will be the continued question of nuclear arms and their value to global security. The discussion that deals with the dilemma of nuclear arms concentrates on the United States' and Soviet Union's Strategic Nuclear Forces and their composition. To this end, the essence of this thesis will be a reevaluation of the current forces and possible factors that may shape the future Strategic Nuclear Forces of the United States. From reviewing our current forces and assessing our requirements in the current and future environment, it may be possible for the United States to restructure strategic nuclear forces of the future. The timeliness of this discussion may be only as accurate as yesterday's news reports with regard to the changes in the international environment and the floor debates in the Houses of Congress between the Administration and the members of Congress.

With respect to the United States strategic nuclear forces of the future, the debate undoubtedly focuses on the force structure of the Strategic Nuclear Triad. The Strategic Nuclear Triad consists of three "Legs" or methods of delivering strategic nuclear weapons: land (Intercontinental Ballistic Missiles), air (Strategic Bombers), and sea (Strategic Nuclear-powered Submarines). The Triad has been utilized by the United States for strategic nuclear deterrence since the Eisenhower Administration. Consequently, the Triad has been credited as the stabilizing force structure that has prevented nuclear war between the

United States and the Soviet Union during the Cold War years. However with the dramatic changes in the global environment and the altered requirements of United States domestic politics, the possibility of a new strategic nuclear force structure should be assessed. Of course, a new strategic force structure must be able to meet the requirements of the current and our future national security needs while taking into consideration the current and future budgetary constraints.

Before the United States strategic nuclear forces of the future may be determined, it appears that a review of the current Presidential national security guidance should be undertaken. Utilizing the current guidance, a future strategic nuclear force structure may be assessed for congruency between present and future force structure in maintaining the national security of the United States. For this study, the research has centered on four major areas and the impact that each may have in deciding the United States strategic nuclear weapon systems. The major areas are: 1) current strategic threat of the Soviet Union and the Warsaw Pact; 2) arms control with regard to a START Treaty and SDI potential to counter the threat of nuclear proliferation; 3) current and planned strategic weapon systems of the Triad; and 4) Congressional and Administration debates on the previous three areas with regard to the appropriate force structure within the current and forecasted budgetary constraints.

A. NATIONAL SECURITY AND PRESIDENTIAL GUIDANCE

For an insight to the past and the future of our strategic nuclear force structure, the appropriate source most logically would be the

Presidential guidance for the national security of the United States. From reviewing the guidance provided in 1987, 1988, and 1990, it is clear that both the Bush and Reagan Administrations have placed a high priority on maintaining a strong strategic nuclear force. Although the priority has been declared, it is significant how each Administration justified the requirement.

The Reagan Administration utilized the past history of the Soviet threat as justification. With the Bush Administration, the changes in the world environment would not support solely a hard line against the Soviets. Also, these changes have fuelled new discussions in Congress to modify the defense budget with respect to domestic priorities. Therefore, the Bush Administration may be required to alter its strategic force structure to obtain cooperation from the Congress in support of the national security.

B. STRATEGIC THREAT

The primary strategic military threat to the United States will continue to be the Soviet Union. The Soviet Union is the only nation that can gravely endanger the United States through a nuclear weapon attack. The challenges for the future are two-fold: first, realization that there is and will be a continued Soviet threat; and secondly, the United States must work with the Soviets to alleviate the tensions in the world and preserve peace.

The realization that the Soviet Union maintains a strong strategic nuclear force does not require much research. The Soviets have

assimilated a strong nuclear force built on ICBMs, SLBMs and STRATEGIC BOMBERS. The other issue in responding to the Soviet threat is understanding the changes that have occurred since 1985 and what permanent impact these changes may have. Of course, the center of this issue is the leadership of Mikhail Gorbachev.

Finally, the issue of the future of Europe must be addressed with respect to NATO and the Warsaw Pact. The future of these two organizations will most assuredly determine the commitment of the United States strategic forces to possible Warsaw Pact targets. These issues will be analyzed for determining if the strategic threat has changed and whether the changes are significant enough to warrant changes in the United States strategic nuclear force.

C. ARMS CONTROL AND THE START TREATY

Arms control has assumed a larger role in the future of the strategic nuclear forces of the United States and the Soviet Union. Currently, the vehicle for lowering levels of strategic forces is the Strategic Arms Reduction Talks (START). Both the United States and Soviet Union have agreed substantively to reduce their strategic nuclear forces in both weapon delivery systems and strategic nuclear warheads. Also, the issue of the United States Strategic Defense Initiative (SDI) must be evaluated in allowing the United States to safely reduce its strategic nuclear forces without fearing a surprise nuclear attack.

The START Treaty will be assessed from a perspective that the major reductions are in fast flying ballistic missiles, while the slower flying

strategic nuclear weapon delivery systems (bombers) are given preferential status. This position is the current negotiating position of the United States and should be instrumental in lowering the Soviet advantage in HEAVY ICBMS. Of course with any arms control agreement, the discussion of verification arises. In the case of the START Treaty, this is a major negotiating item. Unlike the INF Treaty, the START Treaty lowers the number of nuclear weapon systems and warheads, but does not eliminate an entire class of nuclear weapons as the INF Treaty does. Also, the record of Soviet compliance must be considered for deciding how useful the START Treaty will be in the future. The end result to obtaining a successful START Treaty could be a new strategic nuclear force structure for the United States and the Soviet Union.

The second arms talk issue that could have direct bearing on the United States strategic nuclear forces is SDI. SDI would provide the United States with a defensive strategic nuclear capability that we currently do not possess. SDI will not ensure complete defense against strategic nuclear attack, but will make any thought of a preemptive attack less attractive to an aggressor because of the survivability of United States retaliatory forces. Also, a discussion of SDI must include the problem of nuclear and ballistic missile proliferation. By convincing the Soviet Union that it is in the interest of both the United States and Soviet Union to proceed with SDI, the United States may be able to shift from a strictly offensive strategic nuclear force to a combination of offensive/defensive strategic nuclear force structure.

D. STRATEGIC WEAPONS MODERNIZATION PROGRAM

The modernization of the United States strategic nuclear forces began early in the Reagan Administration. The intention was to modernize the three legs of the strategic Triad: ICBMs (Intercontinental Ballistic Missiles), SLBMS (Submarine Launched Ballistic Missiles) and Strategic Bombers. The modernization program has been both successful and unsuccessful in modernization of the strategic nuclear forces.

First, the strategy for the strategic bomber force was to consist of two phases: 1) build B-1B strategic bombers for the 1980s; and 2) develop a new bomber for the 1990s and 21st Century. The program of building the B-1B has been accomplished and the aircraft are operational, although there have been problems with the electronic warfare capability of the aircraft. The second phase of enhancing the bomber leg is the B-2 Stealth Bomber, which is still undergoing major budgetary problems.

Second, the improvement of the SLBM leg has centered on the Trident submarine and the Trident D-5 SLBM. The program was to modernize the submarine force to an all Trident submarine force. The reason for the Trident fleet would be to carry the new D-5 SLBM. The new missile would give the United States sea-based leg the accuracy, range, and nuclear warhead to reliably attack Soviet land-based targets. Currently, Trident submarines are continuing to be delivered, although at a slower pace than originally desired. The D-5 has completed its operational testing and is ready for deployment. The future of the SLBM leg will hinge on many developments, but most assuredly the most significant will be the future of the United States' ICBMs.

Third, the ICBM program has attempted to neutralize the Heavy and mobile ICBMs of the Soviet Union. The initial program implemented was the MX missile, which has multiple warhead capability. The second program which has been debated is the road-mobile, single warhead Midgetman missile system. The Midgetman program was initiated to increase the difficulty of the Soviets to target United States ICBMs. As an alternative to developing an entirely new system such as Midgetman, the MX missile has been recommended as a candidate for establishing a rail-garrison missile system. At the center of the debate between MX and MIDGETMAN is the overriding issue of two missile systems, both vying for the same mission--a mission that may change with an arms control agreement.

E. CONGRESSIONAL INFLUENCE

Congressional influence in the changing world environment may be the prime determining factor of the United States strategic forces of the future. The Congress has been conducting hearings on all levels to independently evaluate the factors that have been introduced in this study. At the heart of Congressional debate is the question of the Soviet threat. If the Congress determines that the threat has been markedly reduced by real or perceived changes in the Soviet Union and Eastern Europe, then Congress will most likely press the executive branch for defense reductions.

Also, Congress and especially the Senate is instrumental in the arms control agreement process. Remembering this, the Senate must ratify any

treaty that is signed by the United States. Therefore, the negotiating position and areas of agreement must be supported, or else the treaty will not be ratified. With this thought in mind, it is logical to believe the type of force structure supported by Congress will be the same force structure supported in arms control negotiations.

Congress will continue to analyze the world environment for new policies and strategies that will support lowering the defense budget of the United States. This is not to say that cuts will be made at the risk of national security, but rather the Congressional Armed Service and Budget Committees are going to be evaluating the different factors for formulating a new defense budget. Therefore, it should be recognized that the cuts in the defense budget will affect the United States strategic nuclear forces of the future.

F. CONCLUSION

The desired result of this study is a recommendation for a policy on determining the strategic nuclear force structure of the future. The desired policy recommendation should be highlighted by a strategy that will utilize the strengths of the United States technological advantages in the areas of nuclear-powered submarines and air- and sea-launched cruise missiles, while deemphasizing the area of intercontinental ballistic missiles. These recommendations are also in agreement with the arms control position that the United States has maintained in the current Strategic Arms Reductions Talks.

Also, a new strategic policy for strategic nuclear weapon systems may require the two affected services (Air Force and Navy) to research such concepts as strategic forces being dual-capable with respect to nuclear and conventional missions. The Air Force has already seen an advantage to this approach with regard to strategic nuclear bombers. Of course, it must be noted that this would be looked on as a destabilizing policy by many experts because of verification, but in the eyes of Congress and the United States general public this approach may appear economically more acceptable than a policy built strictly on weapon systems designed solely for strategic nuclear war.

II. NATIONAL SECURITY AND PRESIDENTIAL GUIDANCE

As the United States enters the decade of the 1990s, the challenges will be great. The greatest challenge may well be to determine how the security of the United States will be maintained. For the last 40 years this challenge and our response has been met by maintaining a policy of triply redundant deterrence that was centered on a strong strategic nuclear Triad force structure. For the future this may not be the solution especially as the world continually changes.

The United States will be required to assess its position in the global arena and design the appropriate strategy to ensure the national security of the United States is preserved. The strategy that is utilized will require adjusting present force structures in the Defense Department to take advantage of changes in the Soviet Union and the Warsaw Pact. Of course, these changes will require cooperation between the President and the Congress to make appropriate decisions on defense issues in a prudent, but fashionable manner.

A. PRESIDENT BUSH'S GUIDANCE

The decisions that are to be made regarding national security of the United States should emulate the posture and priorities that the President has articulated. In March, President Bush signed the 1990 report on the *National Security Strategy of the United States*. The 1990 issue outlined

the four broad national interests and objectives for strategic policymaking:

1. The survival of the United States as a free and independent nation, with its fundamental values intact and its institutions and people secure.

2. A healthy and growing U.S. economy to ensure opportunity for individual prosperity and a resource base for national endeavors at home and abroad.

3. A stable and secure world, fostering political freedom, human rights, and democratic institutions.

4. Healthy, cooperative and politically vigorous relations with allies and friendly nations.¹

These four areas are basically the same broad national interests and objectives as the Reagan Administration's; therefore, continuity in providing guidance for the national security has been maintained. Of course, the 1990 issue takes into account and emphasizes that the United States national security strategy is shaped from the totality of the domestic and international environment, which is dramatically changing. One dramatic change in the international environment is a new Soviet leadership participation role since the mid-1980s that has recognized the requirement for a calmer international environment in order to concentrate on internal crisis in the Soviet Union.² There has also been other changes but with regard to global peace and stability, this may be the most influential.

The importance of the Soviet actions cannot be underestimated because this impacts directly on the relationship between the United States and

¹White House, *National Security Strategy of the United States*, March 1990, pp 2-3.

²Ibid, p 5.

the Soviet Union. The relationship is essential and retains strategic priority because the Soviet Union is the only other military superpower besides the United States. Therefore, the Bush Administration's national security goal with regard to the Soviet Union is to move beyond a strategy of containment and seek integration of the Soviet Union into the international system as a constructive partner.³

As the United States seeks improvement in relations with the Soviet Union, the United States policies do not and will not depend on a particular leader or set of leaders in the Soviet Union. It must be remembered that a policy that is strictly built on a particular leader could change overnight. Thus the Bush Administration, recognizing the Soviet Union will remain a formidable military power, advocates the United States response to Soviet military changes in force structure and modernization will be prudent caution, but a caution the Soviet leadership and people should realize is based on uncertainty, not hostility.⁴

B. PRESIDENT REAGAN'S GUIDANCE

The overriding theme of the guidance from President Bush's 1990 issue of *National Security Strategy of the United States* reflects an attitude of working together, rather than the guidance of the Reagan Administration. President Reagan's 1987 issue of *National Security Strategy of the United States* maintained the perspective that the most significant threat to United States security and national interests was the Soviet Union. With

³Ibid., p 9.

⁴Ibid., pp 9-10.

regard to the past relations between the United States and Soviet Union, President Reagan's 1987 issue stated:

Fundamental differences in economic, social, and political beliefs and objectives lead to an essentially adversarial relationship between the United States and the Soviet Union. The two sides nevertheless share the common goal of avoiding direct confrontation and reducing the threat of nuclear war. The real challenge for American statecraft is how best to realize this commonality of interests, so as to preserve peace without jeopardizing our national security or abandoning our commitment to the cause of freedom and justice.⁵

From the above statement with regard to the Soviet Union, it may be reasoned that President Reagan validated the requirement of a strong nuclear deterrent force for protecting the peace and ensuring the protection of the national interest of the United States.

Further, it may be argued that President Reagan used the 1987 issue to attempt to gain Congressional and public support for strategic nuclear deterrence, which is predicated on the current nuclear Triad. President Reagan supported his rationale for the Triad as:

In the interest of ensuring deterrence, the United States maintains diversified strategic forces to hedge against a disarming first strike, complicate Soviet attack plans, and guard against technological surprise which might threaten one element of our

⁵White House, *National Security Strategy of the United States*, January 1987, p 4. For consistency between President Reagan's policies in 1987 and 1988, see White House, *National Security Strategy of the United States*, January 1988, pp iv-v. In the Preface of the 1988 report, President Reagan stated the fundamentals of our strategy change little from year to year and the discussion in the 1988 report parallels the 1987 report except changes to reflect significant developments. With regard to the Soviet Union, President Reagan acknowledged real changes would be welcomed, but as yet we had not seen any slackening of the growth of Soviet military power, or abandonment of expansionist aspirations. Therefore, since the 1987 and 1988 reports have a similar theme, this chapter will refer to the 1987 report when expressing the policies of the Reagan Administration.

strategic forces. To this end, we maintain a variety of basing modes, launch platforms, and attack vehicles, achieving diversity through a triad of SLBMs, ICBMs, and bombers. Adequate and survivable command and control is an essential element of strategic force structure, and is critical to the credibility of our strategic deterrent...Our strategic forces and the associated targeting policy must, by any calculation, be perceived as making nuclear warfare a totally unacceptable and unrewarding proposition for the Soviet leadership....⁶

President Reagan's commitment to the strategic Triad was presented early in his first term. In 1981, President Reagan unveiled his strategic force modernization program. The five elements of the modernization program were formally presented to Congress in the Report of Secretary of Defense Casper W. Weinberger in 1982. Secretary Weinberger's report addressed the modernization of each leg of the Triad: 1) development and deployment of 100 B-1B bombers with initial operating capability in 1986 and to continue work on an advanced technology bomber (ATB or "Stealth") for the 1990s; 2) development of a more accurate SLBM known as the D-5 or Trident II missile plus the continued construction of one Trident SSBN per year; and 3) step-by-step modernization of the ICBM force with the development and deployment of 100 MX missiles. Additionally, a report to Congress in 1983 on ICBM survivability was to address the research and development on three programs--deep basing, development of long-enduring aircraft that could carry and launch a MX missile, and a ballistic missile defense to protect our land-based missiles.⁷

⁶Ibid., p 21.

⁷Department of Defense, *Report of Secretary of Defense Casper W. Weinberger to the Congress on the FY 1983 Budget, FY 1983-1987 Defense Programs*, 8 February 1982. This report reflects the FY 1983 Defense Budget as of January 31, 1982.

C. COMMITMENT TO THE STRATEGIC TRIAD

The commitment to maintain the strategic Triad has been continued into the Bush Administration and was readily endorsed during the transitional phase between the Reagan and Bush Administrations. In the January/February issue of *Defense* '89, Frank Carlucci as the outgoing Secretary of Defense maintained his support for the strategic nuclear Triad as being the robust deterrent against a Soviet attack in two ways. First, the Triad is an important hedge against a Soviet technology breakthrough that could threaten United States overall deterrent. Secondly, the combined effects of the three legs of the United States Triad complicates Soviet attack planning and its efforts to prevent retaliation.⁸

Secretary Carlucci continued his emphasis on the existing Triad and continuous modernization of the components by expressing his view that the United States Triad must possess various characteristics and capabilities:

...including survivability, prompt response, mission flexibility, adequate numbers and sufficient warhead accuracy and yield--to hold at risk those assets the Soviet leadership values most. No single weapon system incorporates all of these capabilities; hence, the importance of a proper strategic nuclear force mix...To fulfill its purpose, our strategic nuclear TRIAD must be modernized as required. We must continue to develop and deploy new systems that will ensure the credibility and effectiveness of our deterrent....⁹

Since the transition of administrations in 1989, the Bush administration has conducted its own strategic review and has officially

⁸Frank C. Carlucci, Secretary of Defense, "America and the Defense Challenges Ahead", *Defense* '89, January/February 1989, p 4.

⁹Ibid., p 4.

stated, "...the Administration strongly believes that continued strategic modernization is absolutely essential for our national security and that a fully modernized strategic TRIAD must provide the basis of all START force structure options."¹⁰ The same level of priority has been maintained by Secretary of Defense Dick Cheney in his *Annual Report to the President and the Congress* (January 1990). In his report, Secretary Cheney placed strategic nuclear modernization as one of the four priorities in developing the FY 1991 budget request. The report stressed that the capability, survivability, and endurance of our strategic nuclear forces and their associated command and control structure must be assured.¹¹

D. CONCLUSION

With regard to the discussion of national security interest and the requirement for strategic nuclear forces, the guidance from both the Bush and Reagan Administrations has been clear. The United States will maintain a strong strategic nuclear force based on the strategic Triad. Although it is readily noticeable from the statements used to support this conclusion, there is a difference in the manner that the Soviets are projected. Of course, it must be realized that the difference in the world situation since early 1989 requires a modification in tone of

¹⁰Department of Defense, *Report to the Congress on the Analysis of Alternative Strategic Nuclear Force Postures for the United States Under a Potential START Treaty* (Unclassified Version), July 1989, p 2.

¹¹Department of Defense, Secretary of Defense Dick Cheney, *Annual Report to the President and the Congress*, January 1990, p 9.

declaratory guidance by the President and his leading advisors in the administration. There is the exception in the Bush Administration with respect to Secretary of Defense Cheney and his perspective of the Soviet Union. His opinion and the rationale for his beliefs will be discussed later in the chapter on assessing the threat.

A central theme is that the difference in tone between the Reagan Administration in 1987 and the Bush Administration in 1990 may be a key indicator in determining how much emphasis and to what extent the strategic nuclear forces will play in the future as guarantors of United States national security. In the near future the Bush Administration may deduce that changes are going to be required; therefore, cooperation with the Congress is essential for developing the best strategy to support the national interest of the United States. The view of cooperation between the President and the Congress was expressed by President Bush's statement at the conclusion of *National Security Strategy of the United States* (March 1990):

Under our Constitution, responsibility for national defense is shared between the executive and legislative branches of our federal government. The President, for example, is commander-in-chief, while Congress has the power to raise and support armies and declare war. This system of shared and separated powers is well designed to guard against abuses of power, but it works best in the demanding environment of national security affairs only if there is a spirit of cooperation between the two branches and, indeed, a strong measure of national and bipartisan consensus on basic policy...Congress and the President need, more than ever, to reflect that unity in their own cooperation. We owe the American people no less.¹²

¹²White House, *National Security Strategy of the United States*, March 1990, p 32.

The importance of cooperation between the Bush Administration and Congress will be vital as the discussion proceeds to assessing the current threat, the impact of a START Treaty, and the resultant strategic weapon delivery systems. Consequently, the goal of cooperation between the two government branches may be only obtainable through some changes in the United States strategic nuclear force structure.

III. STRATEGIC THREAT

When discussing the United States nuclear force structure of the future, a determination of the potential strategic nuclear threat is essential. Currently, and for the foreseeable future, the most significant threat to United States security interests remains the global challenge from the Soviet Union. This perception was reiterated by the Reagan Administration in the 1988 issue of *National Security Strategy of the United States*.¹³ Furthermore, the attitude of the past with regard to the Soviets may be readily ascertained from former Secretary of Defense Carlucci's statement:

For America and other free nations in this interdependent world, the major potential threat to our way of life will continue to be the Soviet Union. The basis of that threat is Soviet military power, whose forces and deployments have enabled Moscow to gain influence over other nations by its potential to dominate them militarily. Recently, Soviet leaders have claimed that theirs is a defensive military doctrine and that they seek nothing more than a "reasonable sufficiency" of weapons...But at present there is no hard evidence that the evolution in the USSR has resulted in a different and less offensively oriented force structure or in any diminution of resources going into the military...The prudent course is to gear our military posture to Soviet capabilities.¹⁴

The viewpoint of former Secretary Carlucci is extremely important in assessing the strategic threat of the Soviet Union. Of course, it must also be realized that his statement was made in early 1989, before the

¹³White House, *National Security Strategy of the United States*, January 1988, p 5.

¹⁴Frank C. Carlucci, Secretary of Defense, p 3.

fall of the Berlin Wall and the deterioration of the Warsaw Pact. Therefore, a new strategic threat assessment of the Soviet Union will be required with the challenge being two-fold: first, realization that there is and will be a continued Soviet strategic nuclear threat; and secondly, the United States must acknowledge that changes have occurred which encourage the United States to work together with the Soviets to alleviate the tensions in the world and preserve peace. The issue of working together with the Soviets will undoubtedly have a dramatic impact on the future of NATO and the Warsaw Pact. Ultimately, the changes and reforms will affect the strategic nuclear force structure of the United States.

The first area to be discussed will be based on the arguments that the Department of Defense have presented in describing the capabilities of the Soviet Union's strategic nuclear forces. The focal point of this argument will be Secretary of Defense Dick Cheney and his opinions.

The second area of discussion will be on the position that changes have taken place in the Soviet Union and Eastern Europe which warrant a review of our strategic threat assessment. Any current and future assessment must focus on the policies that have been initiated by President Gorbachev. The guidelines for determining the United States response to the Soviet initiatives hinge on opinions and evaluations of how successful and irreversible the current Soviet policies may be in the future. Finally, the future alliance structure of NATO and the Warsaw Pact will be essential in determining the commitment of United States strategic nuclear weapons to the defense of Europe.

It is recognized as the decade of the 1990s begins that the potential threats to an international environment will increase. The threats from the Third World will most likely become greater, especially with regard to nuclear and ballistic missile proliferation. While new threats for the foreseeable future have been assessed as not possessing the capability to immediately endanger the existence of the United States in the near term, the proliferation of nuclear weapons and ballistic missiles may support SDI. Consequently, the only country with the potential to be a strategic threat to the United States will remain the Soviet Union and its strategic nuclear forces. Also, the strategic nuclear threat of the Soviet Union is considered the standard for determining the United States strategic nuclear forces of the United States.

A. SOVIET CAPABILITIES ASSESSMENT BY DOD

The Department of Defense, as the agency responsible for the defense of the United States, is required to formulate a strategy to meet possible threats. The typical method of determining the threat by the Defense Department is by assessing the capabilities of potential threats. In the case of the strategic nuclear threat, the Soviet threat is of primary interest. The most current assessment of the Soviet Union's overall strategic nuclear capabilities has been expressed in the *1990 Joint Military Net Assessment (Unclassified Version)* which states, "...the Soviet Union will remain the only nation capable of unilaterally inflicting vast nuclear destruction on the United States and its allies

through the 1990s."¹⁵ Most likely, that assessment was made with respect to the Soviet strategic nuclear forces being vast and varied with its arsenal of ICBMs, SLBMs, and Strategic Bombers.

The vastness and variations of the Soviet Union's strategic forces may be derived from the Department of Defense's *Soviet Military Power: Prospects for Change, 1989*. The 1989 issue provides operational data on eight different Soviet ICBMs as compared to three ICBMs for the United States; seven different Soviet SLBMs compared to two for the United States; and five Soviet intercontinental bombers as compared to three for the United States. Also, the Soviets are credited with multiple versions for three of their SLBMs.¹⁶

A significant issue with DOD is the point that the Soviets' proclaim a nuclear war is unwinnable and strategic arms arsenals must be dismantled, yet they still continue deploying new generations of ICBMs, SLBMs, and Strategic Bombers.¹⁷ Specifically, DOD and Secretary of Defense Cheney have stressed that the Soviets have shown extraordinary momentum in the modernization and deployment of their offensive strategic nuclear forces such as:

1. The silo-based SS-18 Mod 5 heavy ICBM with its capacity to carry at least ten nuclear warheads, while possessing greater accuracy and throw-weight, gives the Soviets the capability to destroy hard targets such as United States ICBM silos.

¹⁵Department of Defense, Joint Chiefs of Staff, *1990 Joint Military Net Assessment* (Unclassified Version), p ES-3.

¹⁶Department of Defense, *Soviet Military Power: Prospects for Change, 1989*, pp 44-48.

¹⁷*Ibid.*, p 42.

2. The fifth-generation mobile ICBMs -- roughly 170 SS-25 road-mobile missiles and some 18 rail-mobile SS-24s (the latter having the capacity to carry ten warheads) -- enhances the survivability of the Soviet ICBM force.

3. Within the last year, the Soviets have augmented their strategic ballistic missile submarine force by launching the sixth units of the Typhoon- and Delta IV-class submarines. Also the strategic manned bomber force continues to deploy new operational units of the Bear H and supersonic Blackjack bombers as launch platforms for their 3,000-kilometer-range, air-launched nuclear cruise missile.¹⁸

From the specifics provided on the strategic nuclear forces of the Soviet Union, it is logical to accept the position of the Department of Defense when assessing the strategic threat. The facts and figures do not represent a nation that is declaring itself to be defensive in nature as was previously pointed out by statements in early 1989 by Secretary Carlucci. Of course, a comprehensive evaluation of changes in the strategic nuclear forces of the Soviet Union will not accurately reflect the so-called new defensive strategy of the Soviets until approximately 1994. The timeframe of approximately eight years is required for a weapon system to be developed and become operational. Consequently, 1994 will be significant in determining if the Soviets have discontinued their strategic nuclear force modernization program that was pursued during the 1980s.

With this in mind, it is believed that the DoD assessment of the Soviet Union's strategic nuclear force structure should continue to be the

¹⁸Ibid., Preface. Secretary Cheney has formally continued to emphasize in Congressional testimony and DoD publications the fact that the Soviets are modernizing their strategic nuclear forces. See Department of Defense, *Annual Report to the President and the Congress*, January 1990, p 31. Department of Defense, *Fiscal Year 1991 Budget: A Briefing by Dick Cheney Secretary of Defense*, p 3.

determining factor when projecting the requirements for the nuclear strategic forces of the United States. Nonetheless, the changes that have occurred in the Soviet Union cannot be completely disregarded. The changes and proposed reforms in policies may be an insight for permitting greater flexibility in the United States strategic force structure of the future.

B. THE SOVIET UNION'S FUTURE WITH GORBACHEV'S REFORMS

The paramount question in the minds of officials responsible for assessing the Soviet Union's future is whether the changes that have occurred and the proposed reforms will continue. The answer to this difficult question is strictly a matter of opinion. While there are varied opinions, most agree that the changes have made a lasting effect on the Soviet Union, and most assuredly the changes have resulted in irreversible events in Eastern Europe. Much of the debate on the issue centers on President Gorbachev and his future as the leader of the Soviet Union.

Before discussing President Gorbachev and his reforms for the military, it is essential to establish why Mr. Gorbachev was required to propose military restructuring. At the heart of the Soviet problem is their economy. In a 1988 speech by Robert Gates, Deputy Director of Central Intelligence, Mr. Gates stated:

The selection of Mikhail Gorbachev as General Secretary in the spring of 1985 signalled the Politburo's recognition that the Soviet Union was in deep trouble -- especially economically -- trouble that they recognized was affecting their military power and position in the world...There has been consistently strong support in the Politburo

since 1985 for modernization of the Soviet economy. This remains Gorbachev's greatest political asset.¹⁹

The perceptions of Mr. Gates in 1988 provided an insight to the actual condition of the Soviet economy. As reported in the May 14, 1990 issue of *Newsweek*, the CIA has maintained for the past decade that the Soviet Gross National Product (GNP) was about half of the United States' GNP, and Soviet military spending was about 16 percent of the total GNP.²⁰ Even before the *Newsweek* article, the assessments by the CIA were disputed by two Soviet economist.

The economists were Victor Belkin from the Soviet Academy of Sciences and Oleg T. Bogomolov who serves in the Congress of People's Deputies. First, Mr. Belkin said that the Soviet GNP was no more than 28 percent of the United States and may be even less. Secondly, Mr. Bogomolov stated that the Soviet military spending might account for 20 to 25 percent of the Soviet GNP as compared to the CIA estimate of 15 to 17 percent. Also, Mr. Bogomolov said "the economic situation in our country does not allow any alternative" to reducing military expenditures.²¹

With these opinions of the Soviet economy, it becomes readily apparent that economic reform required changes politically and militarily.

¹⁹Robert M. Gates, Deputy Director of Central Intelligence, "Recent Developments in the Soviet Union and Implications for U.S. Security Policy", 14 October 1988, pp 2-3, Manuscript of speech presented to American Association for the Advancement of Science Colloquium on Science, Arms Control and National Security.

²⁰John Barry, "Failures of Intelligence?", *Newsweek*, 14 May 1990, pp 20-21.

²¹Robert Pear, "Soviet Experts Say Their Economy Is Worse Than U.S. Has Estimated", *New York Times*, 24 April 1990, p 6.

According to Michael McGwire, Mr. Gorbachev realized in 1986 that Soviet economic reforms would fail without increasing democratization of the Soviet society, but the democratization could lead to a period of internal upheaval. Therefore, the requirement for stable relations with the United States and Western Europe became more essential. The stabilization of relations would make political sense and ultimately lead to renouncing the capacity to fight a world war.²² By renouncing the capacity to fight a world war and conducting unilateral cuts, the Soviets would be able to shift significant resources from defense to the civilian sector, and withdraw from the arms race, thereby denying the West the "Soviet threat".²³

Additionally, Michael McGwire stated that the Soviets conducted debates to determine what was needed to ensure national security. The new doctrine developed and authorized was termed "defensive doctrine", which resulted in Mr. Gorbachev's statement at the United Nations in 1988 that the Soviet Union needed to move from an economy of armament to an economy of disarmament.²⁴ From the description of events in 1987 and 1988, it seems logical to conclude the Soviet military reforms were not formulated with a desire for change, but the necessity to improve the economy of the Soviet Union.

²²Michael McGwire, "About Face: How the Soviets Stopped Planning for World War", *Technology Review*, Nov/Dec 1989, p 39.

²³Ibid., p 39.

²⁴Ibid., p 39.

If the reforms of the military are for real, it becomes evident that philosophical attitudes toward war, especially nuclear war, required alteration by the Soviet Union. The essence of the philosophical change was expressed in a statement presented on May 10, 1989 before the Defense Policy Panel of the Committee on Armed Services, House of Representatives, by Andrey A. Kokoshin, Deputy Director, Institute for the U.S.A. and Canada, Academy of Sciences of the U.S.S.R., Moscow. Mr. Kokoshin's statement clearly stated that the Soviet Union was engaged in modification of military policy:

We really now have entered the phase of very substantial modification of our military policy along the lines of the whole course of perestroika in the Soviet Union, and we believe that a country which started the profound economic and political reform cannot avoid also reforms in the military sphere, and this is a major source of a new approach to the military thinking in the Soviet Union to our military strategy and tactics.²⁵

Additionally, Mr. Kokoshin's statement suggested as early as 1982 the Soviets had unilaterally undertaken a non-first-use commitment to nuclear strategy. This important change was initiated in the second half of the 1980s as the Soviet military and political thinking, including those at

²⁵House of Representatives, Committee on Armed Services, "Gorbachev's Force Reductions and the Restructuring of Soviet Forces" [H.A.S.C. No.101-3], 10 and 14 March 1989, p 3. The statement of Mr. Kokoshin seems highly relevant because he is a Soviet academic expressing his view on Soviet military policy. Capt. Bill Manthorpe (USN, Ret.) has noted in a working paper in 1989 on "Stability vs Deterrence" that the new Soviet views on military thinking have been formulated for the Soviet leadership by civilian academics. Capt. Manthorpe suggests that the Soviet academics as principal advisors, the Soviets have begun to think about the threat and re-calculating the correlation. This has led to the new thinking with regard to nuclear war.

the highest political and military level, made clear the following fundamental notions:

First, a nuclear war cannot be a continuation of politics; it cannot serve as a means for solving political problems... Second, there can be no victory in a nuclear war. There can be no victors in such a war. Such a war will result not only in the annihilation of those directly involved in the conflict, but it can annihilate the whole mankind.²⁶

Mr. Kokoshin's statement before the House Armed Services Committee with regard to nuclear war appears to have been an extension of the thinking in Mr. Gorbachev's book *Perestroika*. In the introduction to the reader, Mr. Gorbachev describes that in a world with nuclear missiles, there is a requirement for normal international conditions to prevent the outbreak of a world war, even if unsanctioned or accidental. When specifically referring to nuclear war, Mr. Gorbachev states:

Everyone seems to agree that there would be neither winners nor losers in such a war. There would be no survivors. It is a mortal threat for all...Although the prospect of death in a nuclear war is undoubtedly the most appalling scenario possible, the issue is broader than that. The spiraling arms race, coupled with the military and political realities of the world and the persistent traditions of pre-nuclear political thinking, impedes cooperation between countries and peoples, which--East and West agree--is indispensable if the world's nations want to preserve nature intact,

²⁶House of Representatives, Armed Services Committee, 10 and 14 March 1989, p 4. In addition to Mr. Kokoshin's statement, Capt. Manthorpe's working paper in 1989 on "Stability and Deterrence" explained that the Soviet civilian academics concluded and convinced President Gorbachev that: Because of the huge arsenals of nuclear weapons, the chance of either side initiating premeditated nuclear war was unlikely. By accepting this conclusion, Capt. Manthorpe believes that basically the Soviet civilian advisors have accepted MAD (Mutual Assured Destruction) and consider that mutual deterrence exists at the nuclear level. Further, Capt Manthorpe asserted that the Soviet civilian advisors accepted the possibility of mutual nuclear deterrence existing at lower balanced force levels; therefore, START.

to ensure the rational use and reproduction of her resources and, consequently, to survive as befits human beings.²⁷

While the previous discussions on the severe economic conditions have, most likely, been the catalyst to the Soviet changes, it must be remembered when the reforms were initiated. The obvious answer lies with Mr. Gorbachev assuming the leadership role of the Soviet Union. Therefore, the current analysis of the future of the Soviet Union has been centered on whether Mr. Gorbachev succeeds or fails. This statement needs no more support than the actions of President Bush regarding the situation in Lithuania.

Recently President Bush, after conferring with allies and Congressional leaders on the situation in Lithuania, decided to delay implementing sanctions against the Soviet Union. The reason for the delay given by one senior official was that President Bush "...looks at what Gorbachev has accomplished in the Soviet Union and in Eastern Europe in particular, and there are huge equities at stake here".²⁸ Marlin Fitzwater, President Bush's spokesman, added the delay of sanctions was taken because the Soviets had shown 'flexibility' in recent statements regarding Lithuania, and that President Bush did not want to interfere with arms control talks or the schedule for the next Soviet-American summit. Additionally, President Bush stated that his inaction was motivated by fear of provoking the Soviet Union at a tense moment:

²⁷Mikhail Gorbachev, *Perestroika: New Thinking for Our Country and the World* (New York, NY: Harper & Row, Publishers, 1988), pp xiii-xiv.

²⁸Andrew Rosenthal, "Bush Delays Action on Lithuania, Not Wanting to Harm Gorbachev", *New York Times*, 25 April 1990, p 1.

I may do something imprudent...I am concerned that we not do anything that would cause the Soviet Union to take action that would set back the cause of freedom.²⁹

The actions or inactions of the Bush administration with regard to Lithuania reflect a perception of trying to not provoke Soviet action, but maybe more importantly represent a policy of not creating an additional crisis for Mr. Gorbachev. Also, it must be remembered that President Bush advocated in the 1990 edition of the "National Security Strategy of the United States" a policy of working together with the Soviet Union. If a goal of the United States is to work together with the Soviet Union, it appears that a policy of encouraging the success of Mr. Gorbachev is in the best interest of the United States.

Because the United States cannot develop a threat assessment of the Soviet Union on the success of Mr. Gorbachev, any assessment must address the likelihood of Mr. Gorbachev's success. Also, if he does fail, what is the likelihood of the Soviets returning to their previous emphasis on military power? The first issue of Mr. Gorbachev succeeding apparently was enhanced when the Supreme Soviet, after a heated debate, approved a bill for the creation of the presidency in principle on February 27, 1990. Mr. Gorbachev and his supporters had argued that a strong executive was needed to pull the Soviet Union from its economic and political paralysis.³⁰

²⁹Ibid., p 1.

³⁰Susanne Sternthal, "Gorbachev's Executive Power Play", *Insight*, 9 April 1990, p 34.

The underlying motive of establishing a strong presidency may have been the desire of Mr. Gorbachev to switch his power base from the Communist Party to the state and thereby to diminish the role of the party.³¹ The action of decreasing the power of the Communist party was accomplished by deleting Article 6 (guaranteed the Communist Party monopoly of power) from the Soviet Constitution and abolishing the Politburo. The Politburo's replacement was the Presidential Council, which resembles a Cabinet.³² From these recent changes, a logical assessment would be that President Gorbachev is firmly in control of the Soviet Union.

Without a doubt, the constitutional changes in the Soviet Party Plenum during February 1990 were historical as well as indicating support for Mr. Gorbachev's individual power. Also, it must be realized that Mr. Gorbachev accomplished increasing the power of the presidency during a period of overall uncertainty and instability in the Soviet Union. For a recent assessment of Gorbachev's future and uncertainty in the Soviet Union, William Webster, Director of Central Intelligence, addressed the House Armed Services Committee on March 1, 1990. Mr. Webster's assessment was:

In the Soviet Union, a major reversal of President Gorbachev's policies could only come with his removal. This does not seem likely now. In fact, the Party Plenum early last month strengthened his position, while also advancing the reform process and signalling the end of the Communists' monopoly of power...Nevertheless, the long-term outlook for the present leadership, and for the Soviet Union

³¹Ibid., p 35.

³²Ibid., p 35.

itself, is uncertain. Ethnic and other tensions will persist as reform leaders and an increasingly mobilized population deal with dilemmas that have no precedents. Instability will be fueled by serious and still mounting economic problems.³³

After reviewing the reforms of Mr. Gorbachev, the question of determining the Soviet threat cannot be readily answered. The one argument that does seem prominent though is the Soviet Union is in a state of uncertainty and turmoil. These conditions will certainly have an ultimate effect on the future of the Soviet Union. The presence of these conditions with regard to the Soviet Union was expressed by former Assistant Secretary of Defense Richard Perle's prepared statement before the Senate European Affairs Subcommittee. Mr. Perle stated that caution should be exercised as a result of the instability created by Moscow's loosening the grip:

...not only in Eastern Europe, but in the Soviet Union itself, and the uncertainty about the future Soviet leadership...Mr. Gorbachev has set in motion centrifugal forces that have reawakened old ethnic and national allegiances. In Lithuania, Latvia, Estonia, Georgia, Azerbaijan, Moldavia, and elsewhere there are hapless, restive people who have suffered under Soviet imperial domination...No one can say where this will lead. But an unstable Soviet empire could be a dangerous place.³⁴

As far as assessing the strategic threat of the Soviet Union, the changes and reforms of Mr. Gorbachev's leadership are far reaching. A significant change has been the reliance of Mr. Gorbachev on the Soviet civilian advisors for his policy of a new military thinking. From this

³³William Webster, Director of Central Intelligence, "Statement of the Director of Central Intelligence Before the Armed Services Committee, House of Representatives", 1 March 1990, p 3.

³⁴Richard Perle, "Statement before the European Affairs Subcommittee, Committee on Foreign Relations, United States Senate", 7 March 1990, p 3.

new military thinking, the acceptance of nuclear war being unwinnable has evolved. It would be unadvisable to assume that this change in thinking was not supported by other issues. These issues are undoubtedly centered on the Soviet economy and the domestic turmoil in the Soviet Union.

From this overview of the current Soviet situation, the likelihood of a Soviet Strategic nuclear attack appears to have decreased dramatically. In a prepared statement before the Senate Armed Services Committee on January 24, 1990, Mr. Perle (traditionally a pro-defense expert) summarized his thoughts on the possibility of a Soviet nuclear attack as:

There is a second, canonical threat that seems to me much diminished. That is the threat of a massive Soviet nuclear strike, out of the blue, against the strategic retaliatory forces of the United States, a strike that would entail thousands of nuclear weapons exploding on American territory. I believe that Soviet attitudes toward nuclear weapons have been evolving, by and large away from the contemplation of a massive disarming strike. The days when Soviet doctrine considered that nuclear weapons differed little except in explosive power from conventional ones, are past. For the foreseeable future I believe we can safely reduce investment we make in protecting against a massive surprise Soviet nuclear attack.³⁵

It is believed that Mr. Perle's assessment of the current thinking in the Soviet Union will be instrumental in determining the future strategic nuclear forces of the United States.

C. NATO AND WARSAW PACT

Currently, the discussion of the future of NATO and the Warsaw Pact is focused on the events in Germany. This attention is warranted in part

³⁵Richard Perle, "Statement Before the Committee on Armed Services, United States Senate", 24 January 1990, p 3. The same assessment was presented by Mr. Perle's statement on March 7, 1990 before the Senate European Affairs Subcommittee. See previous footnote for source.

because the unification of Germany and the resulting security structure will have an impact on the strategic force structure of the United States. Of course, the opinions are varied with regard to the future security structures in Europe, as new developments are reported daily. For the United States, the issues pertaining to the strategic threat are the future of nuclear weapons in NATO with a unified Germany, and the requirement for United States strategic nuclear forces with regard to Warsaw Pact military targets.

As German unification talks commence with regard to NATO, the issue of nuclear weapons has emerged as a main concern. In what may be considered a response to this concern, President Bush announced the cancellation of some newer battlefield nuclear weapons in Europe and called for a NATO summit to rewrite political and military strategy. President Bush stated:

As democracy comes to Eastern Europe and Soviet troops return home, there is less need for nuclear systems of the shortest range...The revolutionary changes transforming Europe are moving us from the postwar era to a new era in history beyond containment (of Warsaw Pact forces).³⁶

As President Bush was announcing the cancellation of plans to modernize nuclear artillery and Lance missile capabilities for Europe, NATO Secretary-General Manfred Woerner, while not endorsing an entirely de-nuclearized Germany, was reassuring the Soviet Union that a unified Germany in NATO would not pose a threat to the Soviets. Mr. Woerner stated:

³⁶. . ., "Bush Scraps European Arms Plan", *The Monterey Herald* (Associated Press), 4 May 1990, p 1.

We have no intention of shifting the military balance in Europe to the detriment of the Soviet Union...We want to take into account the legitimate security of the Soviet Union...Our mission is clear. This is not a game of winning or losing: At the end, there will only be winners. The Soviet Union will not lose. It will gain -- in stability and security.³⁷

Since announcing the cancellation of battlefield nuclear weapons, the nuclear weapon issue in NATO has progressed to a point where the Dutch and West German defense ministers have urged the United States and other allies to remove nuclear artillery out of Europe. Additionally, Dutch Ambassador to NATO Adrian Jacobovits stated, " We think we can do away with nuclear artillery and we can do it unilaterally."³⁸ At the same time as many Europeans are calling for bans on nuclear weapons, Senator Joseph Biden, chairman of a Senate Foreign Relations Subcommittee on European Affairs, has suggested that a NATO review should begin with the theory of defending Western Europe with conventional forces and stated, " I believe the military mission nuclear weapons previously served in NATO strategy has become obsolete."³⁹

The significance of the nuclear weapons issue is that if NATO comes to believe that battlefield nuclear weapons are no longer needed, then the theory of a progressive escalation to strategic nuclear war may be in question. In contrast, President Bush has maintained that nuclear weapons

³⁷William Tuohy, "Soviets Reassured by NATO", *The Monterey Herald* (Los Angeles Times Service), 4 May 1990, p 1.

³⁸. . . , "NATO Allies Seek Nuclear Weapon Ban", *The Monterey Herald* (Associated Press), 10 May 1990, p 1.

³⁹Ibid.

should be retained in theater by NATO.⁴⁰ This position may require modification if the United States wants to ensure its ultimate goal of a unified Germany being a part of NATO. The difficult issue is that the Soviets require reassurances about security and desire to ensure their own place in the new Europe.

East German Defense Minister Rainer Eppelmann has stated, "If NATO changes its structure and command [system], Gorbachev could accept a united Germany within NATO."⁴¹ Mr. Eppelmann has provided a list of changes that may be required, of which one is the reduction of NATO's nuclear arsenal.⁴² As the debate on nuclear weapons in NATO becomes more intense, the issue of the requirement for the United States strategic forces in support of NATO will arise. This requirement will be determined from assessing the future threat of the Warsaw Pact as a fighting unit.

With the changes toward democracy that have occurred in Eastern Europe, the non-Soviet Warsaw Pact threat to NATO has been significantly reduced. The reduction of this threat was recently expressed by Mr. Webster in an assessment of Eastern Europe. Mr. Webster stated:

As a result of the changes in Eastern Europe, and Soviet actions since President Gorbachev's speech at the United Nations in December 1988, the Warsaw Pact threat to the United States and its NATO allies

⁴⁰Russell Watson, "Losing Out in Europe?", *Newsweek*, 14 May 1990, pp 26-27.

⁴¹*Ibid.*, p 27.

⁴²*Ibid.*, p 27.

has been significantly reduced...Soviet military planners could not count on Eastern European military forces in a conflict with NATO.⁴³

Since Mr. Webster's assessment, Defense Secretary Cheney has announced that a review by strategists of the number and type of targets to be attacked in nuclear war was underway. Mr. Cheney stated:

To the extent that you used to be concerned about targeting military targets in the Warsaw Pact, and the old Warsaw Pact goes away, you've got new requirements.⁴⁴

These acknowledgements of the changes in the Warsaw Pact will certainly affect the requirements of the strategic nuclear forces of the United States.

With regard to the Warsaw Pact and NATO alliances, the strategic threat of the Warsaw Pact has diminished, and the support for nuclear weapons in NATO has begun to be debated vigorously. As far as the United States and its determination of the strategic threat is concerned, the end result will continue to be that the United States strategic forces are considered the last resort for NATO. As the deterioration in the Warsaw Pact continues, the requirement in numbers of United States strategic nuclear weapons needed for Warsaw Pact targets will in all likelihood be decreased.

⁴³William Webster, Director of Central Intelligence, "Statement of the Director of Central Intelligence Before the Armed Services Committee, House of Representatives", 1 March 1990, p 7.

⁴⁴Michael R. Gordon, "Cheney Proposes Sharp Reductions in New Warplanes", *New York Times*, 27 April 1990, p 10.

D. CONCLUSION

In evaluating the strategic threat, the focus of this chapter has centered on the actual strategic nuclear weapon capabilities of the Soviet Union, and the reforms of Mr. Gorbachev. These two areas have proven to indicate a strategic threat remains with regard to the Soviet Union, although the likelihood of a strategic nuclear war has diminished. Therefore, the threat determination of the future must incorporate both issues. The United States is no longer in the position of planning to execute a strategy based on the old worst case assumptions, if the assessment does not support a worst case scenario.

With respect to the Soviet Union's strategic nuclear forces, the capabilities assessment supports the philosophy that the Soviets retain the capability to destroy the United States with nuclear weapons. The capabilities are vast and varied with ICBMs, SLBMs, and Strategic Bombers. The Soviets have shown their intention to maintain these weapon systems through modernization. Although if the Soviet economy continues on its current path of self-destruction, the strategic modernization program may begin to suffer.

As indicated in this review, the Soviet Union's economy appears much worse than previously forecasted. Therefore, major reform programs were initiated by Mr. Gorbachev to improve the economic situation of the Soviet Union. To accomplish a new economic plan, the Soviet leadership was required to alter military and political thinking. The results have led to an acceptance of policy that nuclear war is unwinnable, and the best interest of the Soviet Union would be served by cooperating with the

United States and the Western countries. This plan has appeared to have merit rhetorically, but the economic and ethnic problems that exist have only indicated a state of turmoil and instability in the Soviet Union. Consequently, the real question is whether the reforms of Mr. Gorbachev are reversible.

Additionally, the issue of NATO and the Warsaw Pact must be considered in assessing the strategic threat. It seems apparent that NATO will be maintained as an alliance and a unified Germany will be a member. The German membership will only occur when the Soviet Union is assured of its security, which likely will require removal of most nuclear weapons from Europe. The removal of nuclear weapons will require the United States strategic nuclear forces to play a greater role in European security. However, the disintegration of the Warsaw Pact will lessen the target requirements of the United States strategic forces.

With these issues in mind, the United States assessment of the strategic threat will require the United States to maintain a strong strategic nuclear force structure. At this time it appears logical to presume the likelihood of a strategic nuclear strike by the Soviets seems to be decreasing; therefore, the United States may be afforded the opportunity to examine revised strategic nuclear force structures. Nonetheless, it must be remembered that the ever-present capabilities of the Soviet Union does not allow irrational thinking with regard to the future strategic nuclear forces of the United States.

In my opinion, the correct philosophy for assessing the strategic threat the future comes from an interview of Secretary of Defense Cheney on "Face the Nation". Secretary Cheney stated:

The fact of the matter is that intentions can change overnight. What we have to deal with in the Defense Department are capabilities. And Soviet capabilities that are available today to Mr. Gorbachev, who may in fact have pursued a far more friendly posture toward the West, are still going to be there for his successor...And we have to deal with Soviet military capabilities, not just intentions.⁴⁵

Secretary Cheney's comments are essential in determining the United States strategic forces for the future, although current and future events must not be overlooked as an opportunity to explore new options for the future.

⁴⁵..."Interview with Richard B. Cheney, Secretary of Defense", "CBS NEWS 'Face the Nation'" (News Transcripts, Inc.), 4 February 1990, p 3 (transcript).

IV. ARMS CONTROL AND THE START TREATY

As the United States begins a new assessment of international requirements for the 1990s and the 21st century, arms control has become a topic of major discussion. Arms control provides options for the reduction of weapons while maintaining stability. The arguments for arms control have become varied, but for this review the basic guidelines of discussion will be President Bush's 1990 report on the *National Security Strategy of the United States*, Secretary of Defense Cheney's *Annual Report to the President and the Congress* (January 1990), and the *United States Arms Control and Disarmament Agency: Annual Report to Congress, 1989*. The guidance of these reports provides the overall strategy of the United States with regard to arms control negotiation.

Currently, with respect to strategic nuclear forces of the United States and Soviet Union, the ongoing negotiations are the Strategic Arms Reduction Talks (START) Treaty. The impact of signing and ratifying a START Treaty will definitely affect the United States strategic force structure of the future. Therefore, the negotiating position of the United States must reflect a strategy that favors the strengths of United States' weapon systems technology.

Subsequently, the United States negotiating position should focus on a combination of offensive and defensive strategic nuclear forces. This combination will allow the United States to negotiate with two priorities: first, the reduction of the Soviet Heavy ICBM force in a START Treaty; and

secondly, the defensive potential of the Strategic Defense Initiative (SDI). These two positions could lead to further negotiations which may result in a consensus that ICBMs should be banned in the interest of both the United States and Soviet Union. Although it is recognized that a bilateral agreement will not completely prevent the proliferation of ballistic missiles, an agreement between the United States and the Soviet Union would have an influence on the issue of ballistic missiles.

Presently and for the near future, it would benefit the national security of the United States to support a strategy of limiting ICBMs and continuing the development of SDI to protect the United States and our allies from the increased threat of ballistic missile proliferation. By negotiating for reduction of ICBMs, the United States would be lowering the most significant threat of the Soviet strategic nuclear forces. Furthermore, the advancement of SDI would provide additional support against a Soviet ICBM and SLBM attack, as well as diminish an increasing threat from nuclear and ballistic missile proliferation in Third World countries. At the same time, the Soviets may realize these proposals enhance their security against an increasing threat of proliferation in the Third World.

The following discussion on arms control will concentrate on the previously mentioned topics and in particular, the current negotiations of the START Treaty. It must be remembered that the signing and ratification of a START Treaty will ultimately lead to a modification of the United States nuclear force structure. With this in mind, the United States' arms control negotiations should be focused on the improvement of

stability which is a direct result of negotiating from a position of strength. The theory of negotiating from strength is not a new concept and has been credited by former Secretary of Defense Caspar Weinberger as the method of negotiation which led to the signing of the INF Treaty.

In his book *Fighting for Peace*, Mr. Weinberger states:

There is not a better example of the importance of negotiating from strength than the INF Treaty...The INF Treaty shows that the Reagan Administration policies were correct. It shows negotiations from strength, works. It shows that by sticking with a negotiating position, by refusing to be intimidated by Soviet walkouts, and by not permitting America's goals to be linked to Soviet demands that weaken our strategic defense we can successfully achieve our security goals in a negotiation... Verifiable agreements reducing armaments are an integral part of national security, but they are not an end in themselves. That should be self-evident; but it is often overlooked in the pressures of summitry, politics and the desire to achieve results.⁴⁶

Although full agreement on the success of the INF Treaty may be questioned, the important point is that a conviction was made to negotiate from a position of strength and not let the Soviet Union dictate the United States negotiating position. This attitude must be maintained throughout the START negotiations because the United States' strategic nuclear force structure of the future will be determined by a START Treaty.

A. GUIDANCE FOR ARMS CONTROL

The guidance for arms control is influenced by several agencies of the executive branch. The prevailing theme for arms control in the Bush Administration was expressed in the 1990 report on *National Security*

⁴⁶Caspar W. Weinberger, *Fighting for Peace: Seven Critical Years in the Pentagon* (New York, NY: Warner Books, Inc., 1990), pp 332-333.

Strategy of the United States by stating, "Arms control is a means, not an end; it is an important component of a broader policy to enhance national security."⁴⁷ This philosophy is extremely important to DoD for the development of defense policy and future weapon systems.

In the 1990 report to the President and Congress, OSD (Office of the Secretary of Defense) elaborated on the statement in President Bush's report with regard to arms control by stating:

The United States engages in arms control as part of a coordinated effort to enhance security -- not as an end unto itself. Through arms reduction agreements, the United States seeks to reduce military threats to U.S. and allied interests, inject greater predictability into military relationships, and channel force postures in more stabilizing directions. Such agreements must place a premium on the detection of significant noncompliance and preserve the latitude to conduct an effective political, economic, or military response.⁴⁸ Verification is an essential element of the arms control process.

Of course, the OSD statement does imply an attitude of skepticism with regard to compliance.

⁴⁷White House, *National Security Strategy of the United States*, (March 1990), p 15.

⁴⁸Department of Defense, Secretary of Defense Dick Cheney, *Annual Report to the President and Congress*, January 1990, p 3. Also see Committee on Armed Services, House of Representatives, "U.S. Strategic Forces and START", "Hearings before the Defense Policy Panel of the Committee on Armed Services, House of Representatives" [H.A.S.C. No. 100-98], 16 and 17 May 1988, p 1. The opening statement of former Secretary of Defense James R. Schlesinger before the Defense Policy Panel in 1988 reflect some of the basic thoughts that Secretary of Defense Cheney's report in 1990 advocates. Additionally, Mr. Schlesinger states, "the purpose of arms control is not merely to achieve reductions. One has to think through other aspects of any arms control range, its impact on strategic stability, its impact on the overall defense posture of the alliance--which goes beyond strategic stability--and also, on its political impact."

With respect to arms control agreements, the emphasis on compliance is warranted and should not be taken lightly. It is a recognized belief that arms control is only as effective as the participants' intention to comply with the terms of an agreement. When noncompliance is allowed or not detected, an arms control agreement has failed and the possibility of an aggressor gaining an advantage becomes a major threat. According to Dr. Kerry Kartchner, the United States must not forget that past history of compliance indicates an underlying philosophy of the intent by some governments of noncompliance with an agreement at the time of signing.⁴⁹

The latest report of possible noncompliance relates to the INF Treaty and focuses on two issues: first, the discovery of SS-23 missiles in East Germany, Czechoslovakia and Bulgaria; and second, the dispute over on-site inspection of a former SS-20 missile factory. The first issue is of significance because the INF negotiators had specifically requested and been given assurances that no INF missiles had been transferred to Warsaw Pact allies by the Soviet Union. The second issue is centered on the Soviets' refusal to permit the use of X-ray equipment to monitor missile canisters leaving a former SS-20 factory in Votkinsk. The underlying

⁴⁹Kerry M. Kartchner, "Soviet Compliance with a START Agreement: Prospects under Gorbachev", *Strategic Review*, Fall 1989, p 49. Dr. Kartchner uses two Soviet examples to amplify his point of signing an agreement with the intention of not complying. First, he advocates the 1918 Treaty of Brest-Litovsk as an example of a treaty that the Soviets intended to violate as soon as the major reason for signing the treaty passed (fledgling Bolshevik regime's imminent collapse). Secondly, he cites the Soviets stated the intent of noncompliance at the outset of SALT if the NATO nations deployed strategic ballistic missile submarines additional to the number that existed at the time SALT I Agreements were signed.

concern with the second issue is the violation of the letter and spirit of the INF Treaty's verification regime.⁵⁰ The prospect of Soviet violations of verification on the INF Treaty should create a sense of skepticism on the part of the United States negotiators with regard to the detailed verification procedures that will be required for START. Therefore, the real issue for the United States is determining the appropriate policy for responding to violations of noncompliance as arms control becomes more complicated.

Remember, the issue of noncompliance is a risk that must be understood when an arms control agreement is negotiated. These risks should be calculated and negotiations conducted with a strategy of minimizing risks to the national security of the United States. President Bush stated his guidance for compliance with arms control in his February 27, 1990, report to Congress on Soviet noncompliance with arms control agreements. President Bush specified:

Without exception, the United States expects meticulous fulfillment of all existing and future arms control agreements and all obligations that they entail. Otherwise, the arms control process cannot benefit U.S. national security, nor can treaties be ratified. I am committed to ensuring that there is scrupulous compliance with all arms control agreements and related undertakings. We cannot and will not accept any lesser standard. Put simply, arms control commitments must be precisely defined and scrupulously observed. Nothing less will do...My Administration is committed to the pursuit of new arms control agreements that reduce the threat of the outbreak of war and contribute to international stability...However, they will

⁵⁰Bill Gertz, "Discovery of Soviet Missiles Sidetracks Arms-Control Efforts", *Washington Times*, 2 April 1990, p 3.

be achieved only if effective verification and total compliance are integral elements of the process.⁵¹

At this time it seems unavoidable that President Bush's guidance, if precisely defined and scrupulously observed, will be challenged if a START Treaty [even if only in principle] is to be signed at the May 1990 Summit in Washington.

Although reservations may exist for arms control agreements, the international environment of today requires the United States to pursue arms control initiatives. This position was clearly stated in a report on May 24, 1988, by the Defense Policy Panel of the Committee in Armed Services, House of Representatives. The report stated:

One important factor in determining whether U.S. forces are survivable and effective, of course, is the size of Soviet forces. If there are no limits--that is, no arms control agreement--the potential size of the problem would be unlimited.⁵²

With this in mind, the United States Arms Control and Disarmament Agency (ACDA) position for negotiating arms control is to take advantage of favorable changes in the international arena, but with the realization that negotiations must be conducted with prudence.

In the 1989 annual report to Congress, ACDA states:

While arms control seeks to manage the process of international reductions of arms in the context of improved stability and predictability, there is always the possibility that political

⁵¹White House, *Administration's Report to the Congress on Soviet Noncompliance with Arms Control Agreements (Unclassified Version)*, 27 February 1990, p 1.

⁵²Committee on Armed Services, House of Representatives, "Breakout, Verification and Force Structure: Dealing with the Full Implications of START", *Report of the Defense Policy Panel of the Committee on Armed Services, House of Representatives*, p 9.

reforms may be reversed or that the internal processes of individual nations may outstrip international efforts to reach agreements. Therefore, it behooves the United States to maintain a prudent course aimed at securing lasting agreements that truly enhance national security.⁵³

As the United States moves forward in arms control agreements, the overriding objective is to maintain the national security of the United States while reducing the number of weapons and weapon systems.

In planning for reduction of weapon systems through arms control negotiations, the currently volatile issue of economic savings or benefits will undoubtedly arise. It must be made clear that economic benefits will be a possible result of arms control, not the reason for the initiation of arms control reductions. Mr. Barry Blechman, former assistant director of ACDA from 1977 to 1980, states:

The potential value of conceivable arms control agreements is not sufficient to make economics a significant determinant of arms control policy. Arms control issues should be evaluated strictly in terms of their security and political implications. They should not be viewed as a potential means of economic salvation. If defense savings are necessary for fiscal reasons, they should be achieved through institutional and procedural reforms required to use defense resources more efficiently. For both the United States and the Soviet Union, further reductions in the economic burden of military

⁵³United States Arms Control and Disarmament Agency, *United States Arms Control and Disarmament Agency: Annual Report to Congress, 1989*, pp 2-3. Also see Edward L. Rowny, "Arms Control at Arm's Length", *US Naval Institute Proceedings*, May 1990, p 54. Mr. Rowny, Special Adviser to the President and Secretary of State for Arms Control Matters, expresses in his article that simply, it is U.S. policy that our arms control agreements shall be equitable, verifiable, and must accomplish the following: 1) enhance the national security of the United States and its allies; 2) reduce the risk of war; and 3) strengthen global stability. It is noted by Mr. Rowny that this policy was presented before to the Joint Foreign Affairs and Foreign Relations Committee by ACDA.

expenditures are more likely to come from unilateral decisions than from negotiated agreements.⁵⁴

With Mr. Belchman's statement in mind, it is believed that negotiations should be of primary benefit to the United States security posture, but also be economically beneficial whenever possible. This philosophy requires negotiations to protect areas the United States has already invested in developing and not to initiate new, unfunded programs unless national security will be enhanced. Additionally, it is essential to understand that arms control should not be conducted for purely budgetary reasons, especially if technological advances would be sacrificed.

The end result is that the United States strategy for arms control should focus on the areas of technological advantage to the United States. With the conclusion of a START Treaty, the United States strategic force structure must reflect weapon systems that are technologically advantageous to the United States, not a force structure based on advantage to the Soviet Union. In the following discussion of the START Treaty, the position of the United States and the Soviet Union will be reviewed and individual issues assessed on the possible impact of the United States strategic nuclear forces for the future.

⁵⁴Barry M. Blechman, "A \$100 Billion Understanding", *SAIS Review: A Journal of International Affairs*, Summer-Fall 1989, p 89-90. For a further understanding of Mr. Blechman's statement of not negotiating arms control for potential economic benefits, see entire article pp 73-99.

B. START TREATY

When discussing the realities of a START Treaty, it is evident that the ultimate outcome will be a restructured strategic nuclear force for both the United States and the Soviet Union. In early 1989, the Bush Administration recognized a START agreement and the results on the strategic nuclear forces must be in agreement with Congress, especially the Senate, to ensure ratification; therefore, a complete strategic arms review was initiated before talks on a START Treaty were to be continued. Secretary Baker stressed the importance of the strategic arms review as a means to ensure that an agreement negotiated with the Soviet Union could be ratified by the Senate. At the same time, Secretary Baker acknowledged that there were reservations in the Bush Administration on the present direction of the agreement and the possibility of the agreement actually being ratified by the Senate.⁵⁵

With this in mind, the negotiations on a START Treaty under the guidance of the Bush Administration was delayed until June 19, 1989. At that time, the Bush Administration made its proposals for START which call for:

...deep reductions in strategic nuclear forces aimed at creating a more stable nuclear balance and reducing the risk of war. The

⁵⁵Don Oberdorfer and Robert J. McCartney, "Baker Voices Concern Over START Pact", *Washington Post*, 13 February 1989, p 1. At the time of this article, Secretary Baker was on his first overseas trip as Secretary of State. The article also quoted an earlier testimony before Congress by Secretary Baker on the Bush Administration's desire to "...build on the progress that has been made to date in the START negotiations. But we do want to take sufficient time to do it right, so that if we accomplish a treaty, we can bring back a treaty that we can get ratified here in the Senate."

reductions are designed to support the U.S. goal of strengthened deterrence by reducing the capability to launch a first strike, even in a crisis.⁵⁶

This proposal does not differ from the basic strategy that was formulated in 1982. According to Max M. Kampelman, a former head of the Nuclear and Space Talks in Geneva, the negotiating position of the United States has been:

From the outset of a START negotiations in 1982, the U.S. objective has been to promote stability through deep reductions primarily in those strategic capabilities that pose the greatest threat to stability--namely, fast-flying (and consequently short warning) ballistic missile systems. While seeking deep cuts in those systems most suitable for carrying out first strike, it has promoted the retention of adequate retaliatory capabilities by proposing more permissive limits on strategic forces that are inherently less destabilizing--namely, slow-flying bombers and cruise missiles. The United States has also placed a high priority on ensuring that any agreement be effectively verifiable.⁵⁷

With these goals for negotiating the START Treaty, the current general approach for the United States is a reduction to equal levels in strategic offensive arms for both the United States and Soviet Union. These reductions are to be carried out in a phased manner, achieving equal intermediate ceilings by agreed dates over a period of seven years from

⁵⁶United States Arms Control and Disarmament Agency, *United States Arms Control and Disarmament: Agency Annual Report to the Congress, 1989*, p 12.

⁵⁷Max M. Kampelman, "START: Completing the Task", *The Washington Quarterly*, Summer 1989, p 5. Also see Pat Towell, "Concessions Step up Tempo Toward New Agreements", *Congressional Quarterly, Weekly Report*, 17 February 1990, p 535. As previously mentioned, Mr. Towell also acknowledged that from the beginning the United States negotiating position for START has favored bombers over ballistic missiles. Additionally, Mr. Towell suggests the reasons for supporting bomber-carried weapons over ballistic missile weapons as bombers are both less suited to a surprise attack and are vulnerable to enemy air defenses.

the date the treaty comes into force. The Soviet Union's position is that the reductions are to be carried out in two phases, with equal ceilings after phase one. The United States has also maintained that a START Treaty will not be contingent on a resolution of Defense and Space issues. This position has been accepted by the Soviet Union, except if it is determined that the United States has gone beyond the Anti-Ballistic Missile Treaty as defined by the Soviet Union. On the issue of ABM Treaty violations, the United States holds the position that no further strategic arms control treaties will be signed with the Soviet Union until the violations of the Krasnoyarsk radar are corrected in a verifiable manner and meets United States criteria. Presently, the United States has been satisfied with the Soviet Union's announcement that the Krasnoyarsk radar will be eliminated.⁵⁸

From the general approaches of the United States and the Soviet Union, the limitations of the START Treaty have evolved. Both the United States and the Soviet Union have negotiated from positions that favor their respective strategic nuclear force structures. As a result, four major areas have been established for the reduction of offensive strategic nuclear forces: delivery vehicles, warheads, warhead sublimits, and heavy ICBMs.

According to ACDA's issue brief on April 4, 1990, the proposed limitations in these areas are:

⁵⁸United States Arms Control and Disarmament Agency, Office of Public Affairs, "Nuclear and Space Talks: U.S. and Soviet Proposals" (ISSUES BRIEF), 4 April 1990.

1. Delivery Vehicles will be limited to a 1,600 ceiling for strategic nuclear delivery vehicles (SNDVs), which comprise deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers, and heavy (Strategic) bombers. Both the United States and the Soviet Union have agreed to these limitations in this area.
2. Warheads have been set at a 6,000 ceiling, to include the accountable number of deployed ICBM and SLBM warheads and long-range, nuclear-armed ALCMs (air-launched cruise missiles), and each heavy bomber equipped only for nuclear-armed gravity bombs and short-range attack missiles (SRAMs) counting as one warhead. Both the United States and the Soviet Union have agreed to these limitations in this area.
3. Warhead Sublimits have been set at 4,900 for ballistic missile warheads. Additionally, the United States has supported a sublimit for ICBM warheads. The United States has proposed that of the 4,900 ballistic missile warheads 3,000-3,300 could be ICBMs. In response to this proposal, the Soviet Union has proposed that if 3,300 is the sublimit for ICBMs then conversely the same sublimit should apply to SLBMs. Additionally, the Soviet Union has proposed a sublimit of 1,100 for deployed heavy bomber-carried warheads.
4. Heavy ICBMs will be limited to 1,540 warheads on 154 deployed heavy ballistic missiles. The United States has also proposed a ban on production, flight testing, or modernization of new or existing types of heavy ICBMs. In contrast, the Soviet Union proposal agrees with the 1,540 and 154 limit but permits production, flight testing, or modernization of existing types of heavy ICBMs. The Soviet Union does support a ban on the development, testing, and deployment of new types of heavy ICBMs.⁵⁹

After establishing the limitations on delivery vehicles and warheads, the next issue of concern is counting rules. With regard to ballistic missile warheads, both sides have agreed that each warhead counts as one toward the 6,000 warhead ceiling. Furthermore, both sides agree that a heavy bomber equipped only with gravity bombs and short-range attack missiles (SRAMs) counts as one SNDV under the 1,600 ceiling and one warhead under the 6,000 warhead ceiling. Presently, a major issue of

⁵⁹Ibid.

negotiation regarding counting rules is when an ALCM will be counted against the 6,000 warhead limit.⁶⁰

Both sides have agreed that the United States' heavy bombers will be credited with 10 ALCMs. Also, there is agreement by both sides that the Soviet Union's current heavy bombers will be credited with 8 ALCMs and future Soviet heavy bombers will be credited with 10 ALCMs. The controversy is determining the range at which an air-launched missile is counted as an ALCM. The United States position is that an ALCM is an air-launched cruise missile with a range greater than 1,000 kilometers. In contrast, the Soviet Union considers an ALCM as an air-launched cruise missile with a range greater than 600 kilometers. Therefore, the disparity in defining the range of whether a missile is considered an ALCM or not would impact the 6,000 warhead limit.⁶¹ With the announcement by Secretary of State Baker on May 19, 1990, the range for counting air-launched cruise missiles against the 6,000 warhead ceiling had been agreed on as being in favor of the Soviet Union proposal of 600 kilometers or about 375 miles, but agreement has also been reached to exclude the United States "Tacit Rainbow" defensive systems from these limitations.⁶²

⁶⁰Ibid.

⁶¹Ibid. Also see Michael R. Gordon, "Arms Control Process: Back on Track", *New York Times*, 20 May 1990, p 10. Thomas L. Friedman, "U.S. and Soviets Close to a Pact on 30% Cut in Nuclear Missiles; Agree on Chemical-Arms Curbs", *New York Times*, 20 May 1990, p 1.

⁶²Michael R. Gordon, "Arms Control Process: Back on Track", *New York Times*, 20 May 1990, p 10. Also see Thomas L. Friedman, "U.S. and Soviets Close to a Pact on 30% Cut in Nuclear Missiles; Agree on Chemical-Arms Curbs", *New York Times*, 20 May 1990, p 1.

Another issue of disagreement in the counting rules has been sea-launched cruise missiles (SLCMs). The United States defines a SLCM as a sea-launched, nuclear-armed cruise missile with a range greater than 300 kilometers. In contrast, the Soviet Union defines a SLCM as a sea-launched, nuclear-armed and conventionally-armed cruise missile with a range greater than 600 kilometers. In any case, SLCMs are not currently under the provisions of a START Treaty.⁶³ Of course, the announcement on May 14, 1990 of Secretary Baker carrying a new arms-control "package" to Moscow which included air-launched and sea-launched missiles could affect whether SLCMs are included in a START Treaty.⁶⁴

⁶³United States Arms Control and Disarmament Agency, Office of Public Affairs, (ISSUES BRIEF), 4 April 1990.

⁶⁴R. Jeffrey Smith, "U.S. Officials Head for Kremlin with Arms-Control Concessions", *The Monterey Herald* (Washington Post Service), 14 May 1990, p 3. See also William Matthews, "Soviet: U.S. Must Discuss Naval Arms Cuts", *Navy Times*, 21 May 1990, p 24. Barry Schweid, "U.S., Soviets Face Missile Issues Today", *The Monterey Herald*, 16 May 1990, p 1. Barry Schweid, "Baker to Press Soviets on Lack of Talks with Baltic Republics", *The Monterey Herald*, 17 May 1990, p 1. Soviet Marshal Sergei Akhromeyev, chief military adviser to Soviet President Mikhail Gorbachev, speaking before the Senate Armed Services Committee warned that if the United States did not discuss naval nuclear weapons the Soviet Union would stop progress in other nuclear and conventional reduction talks. Of course, the position that Marshal Akhromeyev put forth before Congress the week of May 7, 1990 was possibly rejected by Foreign Minister Eduard A. Shevardnadze on May 16, 1990. In response to questions that the Soviet Union had retreated on arms issues, Mr. Shevardnadze replied, "I don't think so. This is the view of those who really don't know what's happening." These comments by two Soviet high ranking officials just prior to completion of the START Treaty could ultimately result in changes of the United States negotiating position or the agreement will not be signed. In my opinion, the Soviets will not press SLCMs in a START Treaty at this time.

This announcement could possibly mean that the Soviet Union's position on SLCMs was in contrast to the reports in February 1990. Ambassador Rowny stated:

At the February 1990 Ministerial (between U.S. Secretary of State James Baker III and Soviet Minister Eduard Shevardnadze), it appears that the Soviet Union generally agreed to the concept of a declaratory approach as a basis for involving SLCM in arms control (i.e., the issuance of politically binding statements regarding the number of SLCMs of a specified type and range each side plans to deploy.⁶⁵

The issue of arms control for sea-launched cruise missiles would be contradictory to previous policy towards naval arms control and that is-- the United States has not negotiated naval arms control. The reason for the United States position was presented to the Senate Armed Services Committee, after Marshal Akhromeyev had testified, by Admiral Carlisle A.H. Trost, Chief of Naval Operations. Admiral Trost stated:

As a maritime nation, dependent on seaborne commerce and access to the world's markets, the U.S. cannot afford to limit through negotiations the very forces that are essential to protecting these interests...Restricting sea-launched cruise missiles would pose a substantial, if not impossible, obstacle to realistic verification...The only credible methods would involve an excessively intrusive inspection of submarines and ships.⁶⁶

With this in mind, the issue of SLCMs in a START Treaty should remain a non-negotiable issue at this time. Furthermore, in my opinion, the

⁶⁵Edward L. Rowny, "Arms Control at Arm's Length", *US Naval Institute Proceedings*, p 56. See also Barry Schweid, "Chemical Accord Caps Arms Talks", *The Monterey Herald*, 11 February 1990, p 3A. At the conclusion of the Moscow Ministerial in February 1990, it was announced that the most significant result of negotiations was an unexpected breakthrough on sea-launched cruise missiles. Secretary Baker and the Soviets agreed to take sea-launched cruise missiles out of the START Treaty.

⁶⁶William Matthews, "Soviet: U.S. Must Discuss Naval Arms Cuts", *Navy Times*, 21 May 1990, p 24.

Soviet Union's commitment to the issue does not warrant the United States negotiating away SLCMs which are clearly in the favor of the United States. With the announcement of Secretary Baker on May 19, 1990, it has become more evident that the Soviet position on the SLCM issue is not firm. Although it was announced that the United States had agreed to an 880 limit on SLCMs, Secretary Baker stated that limit would take the form of a declaration attached to the strategic arms treaty and would be politically binding, meaning it would be a written assurance but would not be considered a legal obligation by the United States.⁶⁷ Additionally, the benefits of maintaining SLCMs as far as the United States is concerned are not limited to the Soviet Union. SLCMs provide the United States a highly sophisticated and flexible weapon that would enhance United States' projection of power in the Third World.

The last major issue that a START Treaty must deal with is verification of compliance. From the guidance that was previously discussed, the United States will not enter into agreements that are unverifiable. The START Treaty creates an unique situation, in that the agreement limits classes of nuclear weapons, but does not eliminate a class of nuclear weapons as does the INF Treaty⁶⁸. Therefore, the START

⁶⁷Michael R. Gordon, 20 May 1990, p 10. Also see Thomas L. Friedman, 20 May 1990, p 1.

⁶⁸United States Arms Control and Disarmament Agency, Office of Public Affairs, *Understanding the INF Treaty*, p 1. ACDA describes the INF Treaty as stating, "For the first time in history, the United States and the Soviet Union have agreed to destroy an entire class of missiles. The sides have also agreed to the most comprehensive package of verification measures ever negotiated including on-site inspections."(p 1). Furthermore, *Understanding the INF Treaty* provides a description of the

Treaty must provide at a minimum: exchange of data both before and after the reductions take place; on-site inspection to verify data and to observe elimination of weapons; continuous on-site monitoring of the perimeter and portals of critical production facilities; and short-notice inspection of sites where treaty-limited systems are located both during and after the reduction period⁶⁹.

Currently, the United States and the Soviet Union have specifically reached agreement on three issues of verification. First, advance notification will be provided for one major strategic exercise involving heavy bomber aircraft per calendar year. Second, each side will exhibit one type of heavy bomber to demonstrate verification procedures for distinguishing between ALCM heavy bombers and non-ALCM Heavy bombers. Third, each side will demonstrate its proposed procedures for on-site inspection of reentry vehicles for each side's ballistic missiles. Additionally, both sides have exchanged information on missile tagging

following as they pertain to the INF Treaty: background, negotiations, ratification, elimination, destruction, inspections, and communications.

⁶⁹United States Arms Control and Disarmament Agency, Office of Public Affairs, "Nuclear and Space Talks: U.S. And Soviet Proposals" (ISSUES BRIEF), 4 April 1990. Additionally, the United States has proposed to accelerate and begin implementing verification and stability measures such as: early establishment of on-site perimeter/portal monitoring of certain missile production facilities, exchange of data on each side's strategic nuclear forces, and addressing the problem of short-time-of-flight SLBMs.

technologies and implemented one of the important verification and stability proposals announced by President Bush in June 1989.⁷⁰

Of course, there are other major areas of apprehension for the United States with regard to verification of compliance. The first of these areas is non-deployed missiles⁷¹. It appears that there are two problems

⁷⁰Ibid. For further explanation of Heavy Bomber inspections, see United States Arms Control and Disarmament Agency, Office of Public Affairs, "START: Heavy Bomber Inspections" (ISSUES BRIEF), 29 January 1990. Both sides have agreed to conduct reciprocal exhibitions of certain Strategic, or heavy bombers. The exhibitions will demonstrate those features which distinguish bombers equipped to carry nuclear-armed, air-launched cruise missiles (ALCMs) from bombers not equipped to carry such missiles. The Soviet Union will display two versions of the Tupolev-95, commonly known in the West as the Bear. The United States will display two variants of the B-1B. For further explanation of RV inspections, see United States Arms Control and Disarmament Agency, Office of Public Affairs, "START: RV Inspections" (ISSUES BRIEF), 29 January 1990. The START Treaty RV inspection was agreed to by both sides on January 22, 1990. The agreement will allow each side to conduct reciprocal demonstration of each side's proposed procedures for verifying that the number of RVs on a ballistic missile is no greater than that specified in the START Treaty. This agreement to conduct trial RV inspections marks the first time in history that the United States and the Soviet Union will inspect the number of nuclear warheads on each other's ballistic missiles. For further explanation of Tagging, see United States Arms Control and Disarmament Agency, Office of Public Affairs, "START: Tagging Demonstration" (ISSUES BRIEF), 29 January 1990. Additionally, the tagging of missiles is similar to "fingerprints" of an individual. A particular tag would be read and compared with a record to verify the missile's tag is authentic. For the tags to be effective, they must meet stringent requirements: readable with high reliability and precision; durable, remaining readable throughout a missile's lifetime; unique and non-reproducible; and not susceptible to removal and transfer.

⁷¹United States Arms control and Disarmament Agency, Office of Public Affairs, 4 April 1990. Also see House of Representatives, Committee on Armed Services, "Breakout, Verification and Force Structure: Dealing with the Full Implications of START", "Report of the Defense Policy Panel of the Committee on Armed Services, House of Representatives", 24 May 1988, pp 2-9. This section of the Defense Policy Panel of the HASC specifically addresses concerns of nondeployed missiles. The report points for concern of possible cheating by the Soviet Union on undeclared missiles, but specifically states that the nondeployed "legal" missiles allowed by START

with non-deployed missiles. First, the numerical limit has not yet been set on non-deployed ballistic missiles and the warheads attributed to them for all ICBMs of a type that has been tested from a mobile launcher. Second, the concern of ensuring the Soviet Union will not be able to break these missiles out and deploy them on a mobile test-launcher in a crisis.

A second area that will be difficult for the United States to monitor is mobile ICBMs. Even though the United States has agreed to lift the ban on mobile ICBMs, the concern appears to be effective verification on numerical limits and establishment of guidelines for deployment sites. The mobile issues with regard to the Soviet Union's forces have become more important, as the two proposed United States' mobile systems have continued to be debated by Congress and the Bush Administration for funding support.

After reviewing the proposals of the United States and the Soviet Union, the determination of the overall position of the two sides with regard to offensive strategic nuclear delivery vehicles is readily discernible. First, the Soviet Union has built their strategic nuclear forces on ICBMs. The Soviet ICBM force has developed into Heavy (SS-18) and a mobile (SS-24 and SS-25) force. Consequently, the Soviets would not likely negotiate on these weapon systems and if they did, their compliance may be in question. According to Dr. Kartchner's evaluation of possible Soviet violations of SALT agreements, the Soviets have a pattern of

represent a significant potential for Soviet rapid breakout from the treaty. The report states that the legal missiles do not require silos, special mobile launchers, or submarines. These missiles can be launched at above ground sites off relatively simple stands.

maintaining compliance with proposals that they initiate. If the proposal is not originally made by the Soviets, the Soviets are more inclined to noncompliance, especially on last-minute concessions for political sake.⁷² Therefore, if the United States does propose a ban on mobile land-based ICBMs with multiple warheads⁷³, the Soviet Union would most likely turn down the proposal. Additionally, an acceptance by the Soviets would most likely lead to noncompliance, especially with the verification problems that exist.

Secondly, the United States position will continue to support slow-flying delivery vehicles over the fast-flying ballistic missiles. The United States proposals will undoubtedly be that the Heavy and mobile ICBMs are inherently destabilizing; therefore, these systems should be banned. As previously mentioned, the United States position on a START Treaty must reflect the technological advantages that the United States possesses. Hence, the United States will resist as much as feasible discussions on limiting SLBMs and affecting our SSBN fleet. Additionally, the United States will increase reliance on Strategic Bombers carrying ALCMs. Lastly, the one class of delivery vehicle that the United States will try to maintain separate from a START Treaty is SLCMs.

⁷²Kerry M. Kartchner, "Soviet Compliance with a START Agreement: Prospects under Gorbachev", *Strategic Review*, Fall 1989, pp 52-54. Dr. Kartchner developed a table of 9 possible violations with SALT agreements of which only one was a Soviet proposals. The other 8 possible violations were non-Soviet proposals.

⁷³Robert C. Toth, "U.S. May Push Missile Ban at Arms Talks", *Los Angeles Times*, 31 March 1990, p 13.

C. STRATEGIC DEFENSE INITIATIVE

As the United States looks to the future with regard to strategic nuclear forces, the area that should receive increased support is a transition to a balanced offensive/defensive structure. The importance of developing a defensive structure would be invaluable when discussing arms control. Currently, the Defense and Space Talks (DST) is the forum for discussing defensive systems. The United States' general approach with regard to DST is the United States:

...seeks to facilitate a cooperative transition to a stabilizing balance of offensive and defensive forces, should effective defenses against strategic ballistic missiles prove feasible. The U.S. also seeks to preserve the option to develop and deploy advanced defenses when they are ready, at a measured pace and in a cooperative way.⁷⁴

The United States' position is that Defense and Space issues should be addressed in a new treaty. Whereas, the Soviet Union's position is that Defense and Space issues should be an integral part of the ABM Treaty.⁷⁵

The United States views DST as the forum to promote the Strategic Defense Initiative (SDI). When referring to SDI being discussed as part of DST, Ambassador Rowny states, "Throughout these discussions we continue to make clear to the Soviets our commitment to the Strategic Defense Initiative (SDI)."⁷⁶ The United States has pursued SDI from the original announcement in the Reagan Administration as an opportunity to move from

⁷⁴United States Arms Control and Disarmament Agency, Office of Public Affairs, "Nuclear and Space Talks: U.S. and Soviet Proposals" (ISSUES BRIEF), 4 April 1990.

⁷⁵Ibid.

⁷⁶Edward L. Rowny, p 56.

an exclusively offensive strategic nuclear weapons posture to an offensive/ defensive posture. Of course, the original reason for proposing SDI was to defend against Soviet ballistic missiles. SDI would hopefully prevent a Soviet ICBM attack, which has been described earlier in this study as the most destabilizing class of strategic nuclear weapons. Today, the Soviet ballistic missile threat remains the primary rationale for SDI, but as mentioned earlier, the potential threat from nuclear and ballistic missile proliferation in the Third World is steadily increasing.

It is recognized that there are presently two agreements for limiting nuclear and ballistic missile proliferation: the Nuclear Non-Proliferation Treaty (NPT) and the Missile Technology Control Regime (MTCR). First, according to ACDA's 1989 report to Congress, the NPT entered into force in 1970 and with 140 parties, is the most widely accepted arms control treaty in history. Additionally, ACDA's report states:

Under the NPT, nonnuclear weapon states pledge not to acquire nuclear explosives and to accept IAEA safeguards on all peaceful nuclear activities as a means to verify that pledge. Nuclear weapon states party to the Treaty, i.e., the United States, United Kingdom, and the Soviet Union, have pledged not to transfer nuclear explosives to any recipient state and not to assist nonnuclear weapon states in any way to acquire nuclear explosives.⁷⁷

Second, the MTCR was established in 1987 with the guidelines to limit the risks of nuclear proliferation by controlling transfers that could

⁷⁷United States Arms Control and Disarmament Agency, *United States Arms Control and Disarmament Agency: Annual Report to Congress, 1989*, p 60.

make a contribution to nuclear weapons delivery systems other than manned aircraft. The guidelines were not designed to impede national space programs or international cooperation that were not involved in nuclear weapons delivery systems. The seven governments who adopted the MTCR were the United States, Canada, France, the Federal Republic of Germany, Italy, Japan, and the United Kingdom.⁷⁸

Even with these agreements to limit proliferation, the number of countries possessing nuclear and ballistic missiles continues to increase. Admiral Trost stated, "By the year 2000, at least 15 nations will be producing, or will have acquired ballistic missile technology, and at least six are actively developing nuclear weapons."⁷⁹ It appears that the issue of proliferation is not going to decrease in the Third World because of NPT and MTCR agreements. This point was made by Senator John McCain, member of Senate Armed Services Committee, in a speech before the

⁷⁸White House, Office of the Press Secretary, "Missile Technology Control Regime: Fact Sheet to Accompany Public Announcement", 16 April 1987.

⁷⁹Admiral Carlisle A.H. Trost (USN), Chief of Naval Operations, "Maritime Strategy for the 1990s", *U.S. Naval Institute Proceedings*, May 1990, p 94. Also see William Webster, Director of Central Intelligence, "Testimony on Nuclear and Missile Proliferation Before the Senate Committee on Governmental Affairs", 18 May 1989, pp 9-10. Mr. Webster stated that in the long term many countries will not want to rely on foreign nations for their arsenal of strategic missiles. Although the countries developing these missiles will not be able to make them as accurate as the United States' and Soviet Union's missiles, these countries and their missiles will be cause for great concern. Also see United States Arms Control and Disarmament Agency, "Ballistic Missile Proliferation in the Developing World", *World Military Expenditures and Arms Transfers*, 1988, pp 17-20. ACDA provides a summary of nations that have acquired ballistic missiles, the source nation, and whether the missile has been deployed.

Senate on the report of Iraq acquiring nuclear weapon detonators. Senator McCain stated:

...we have had another grim warning that the process of proliferation is now outpacing our faltering efforts at arms control. We have heard reports that United States and British officials have intercepted a shipment of nuclear detonators to Iraq...We have heard reports that they have found yet further proof that behind the supposed shield provided by the Nuclear Proliferation Treaty, the treaties and conventions affecting chemical and biological weapons, the missile technology control regime, lurks the reality of a new global arms race.⁸⁰

In my opinion, it is imperative for the United States to ensure itself against some radical Third World country that may possess nuclear weapons. According to Lieutenant General Robert D. Hammond, Chief of the Army Strategic Defense Command, the threat is no longer bi-polar:

The Third World may not behave as reasonably or as rationally as the Soviets. For some of them, the more it hurts, the better they like it. If we face an adversary who has ballistic missiles and who's not rational, we need some way to defeat the threat not just deter it.⁸¹

General Hammond further commented that the United States will need SDI, the "Star Wars" missile shield, more in the future than when President Reagan proposed building SDI in 1983.⁸²

A likely solution to the nuclear and ballistic missile proliferation in the Third World is for the United States to continue the development and deployment of SDI. Additionally, it would also benefit world

⁸⁰Senator John McCain, Senate Armed Services Committee, "Nuclear Proliferation in Iraq", "Congressional Record--Senate" (S3351), 28 March 1990.

⁸¹William Matthews, "Missiles in Third World Pose New Threat", *Navy Times*, 16 April 1990, p 28.

⁸²*Ibid.*

stability to persuade the Soviet Union to cooperate in SDI. The Soviet Union should realize that SDI could be vital to their defense as nuclear and ballistic missile proliferation increases in the Middle East, a geographic location where these weapons could easily reach the Soviet Union. The Soviet Union must realize that the Third World proliferators may not act as rationally as the United States when it comes to nuclear and ballistic missiles.

As a result of increasing proliferation in the Third World, the United States may have validated the requirement for developing SDI. Consequently, the United States, if successful, would be able to pursue the goal of an offensive/defensive force structure instead of only offensive strategic nuclear forces. Furthermore, SDI would be the first phase in arms control leading towards elimination of the most destabilizing threat of the Soviet Union's ICBMs. The impact of developing and deploying SDI is going to assuredly alter the design and composition of the United States offensive strategic nuclear Triad.

D. CONCLUSION

The issue of arms control is undoubtedly going to shape the strategic nuclear force structure of the United States. Presently, the Bush Administration appears to view arms control and especially negotiations on strategic nuclear forces as a method to continue the improvement of relations with the Soviet Union. The use of arms control in this manner is in character with the Bush Administration's philosophy of utilizing arms control as a means, but not as an end to development of policies

which enhance national security. With this in mind, it is only natural that the current arms control discussions will focus on the START Treaty and its potential to limit strategic nuclear weapons.

The START Treaty would enable the United States to promote its long term goals of promoting strategic stability through limiting and possibly the eventual elimination Soviet ICBMs. While negotiating to achieve this goal, skillful negotiating by the United States is required to ensure that our technological advantages are not negotiated away. Therefore, the United States position will continue to support slow-flying strategic bombers and cruise missiles. The one area that the United States will relentlessly resist discussing is SLBMs and their launch platform--SSBNs. Of course, the Soviet Union will most likely resist the banning of ICBMs (Heavy and Mobile) without the United States diminishing its strategic nuclear force structure. It may be projected that the target of the Soviet Union's proposal will be the United States SLBM force, considering that the United States does not have the comparable ICBM force of the Soviet Union. This possibility would mean the United States could lose a primary technological advantage and therefore must be resisted.

Consequently, the United States may be required to place more emphasis on a balanced offensive/defensive strategic nuclear strategy. This will mean the development and deployment of SDI for security against the primary Soviet ballistic missile threat. As mentioned previously, the strategy for soliciting support for SDI may be the increasing nuclear and ballistic missile threat from the Third World. Additionally, a strategy of utilizing the Third World as a threat with regard to nuclear and

ballistic missiles may entice the Soviet Union to cooperate in SDI and ultimately to decide that a policy of eliminating ICBM may be beneficial. If this strategy was implemented, the United States would have achieved its goal without decreasing areas of United States technological advantage. Without doubt the START Treaty and SDI are going to impact the United States strategic nuclear Triad for the future.

V. STRATEGIC WEAPONS MODERNIZATION PROGRAM

The modernization of the United States offensive strategic weapons is the essence of the debate concerning the future of the United States strategic nuclear Triad. The current modernization program that the United States is pursuing was originally ordered under the guidance of the Reagan Administration and has been reviewed by the Bush Administration. At the conclusion of the review, the Bush Administration reached the decision to continue supporting modernization of all three legs of the Triad. Needless to say, the decision on full modernization of the strategic nuclear Triad is being reevaluated by the Administration and the Congress because of the daily changing events in the international environment.

With this in mind, the most obvious question to be answered is why the United States needs an "offensive-minded" strategic nuclear Triad. The answer to that overall question was previously addressed when discussing the strategic threat and arms control, but the reasoning behind the requirement for a specifically offensive-minded strategic nuclear Triad has not been addressed. Therefore, a discussion on the program of strategic nuclear modernization must be initiated from the standpoint of what will these offensive weapon systems provide for our policy of deterrence.

In his prepared statement before the Senate in March 1990, General John T. Chain, Commander in Chief of Strategic Air Command and Director of Strategic Target Planning, stated:

...the need for rapid power projection, escalation control, and earliest termination of hostilities on favorable terms will remain fundamental objectives of U.S. forces...Offensive weapons will remain essential to these objectives. Deterrence based solely on defense, for example, ensures that the worst thing that can happen to an aggressor is that his attack fails--in effect, he loses nothing, and stands to gain substantially, in any challenge to U.S. interests. Strategic forces must provide certainty of effective U.S. retaliation against what an aggressor most values under all scenarios--this is the essence of deterrence.⁸³

General Chain's statement reflects his opinion as the senior military officer in direct command of the United States strategic nuclear forces; therefore, it may be assumed that the modernization of the strategic nuclear Triad is the preferred method to maintaining deterrence.

For understanding the policy to continue the modernization program of the strategic Triad, it appears that three points should be addressed. The first concerns the original proposals of the Reagan Administration and the Scowcroft Commission's report on strategic forces for the Reagan Administration. The second is the continued support of the Triad after President Bush's strategic review in 1989. The third is an overview of the modernization program of the three legs of the strategic nuclear Triad as the program currently exists.

A. PRESIDENT REAGAN'S DECISION TO MODERNIZE STRATEGIC TRIAD

The modernization program of the strategic nuclear Triad was unveiled by President Reagan in 1981, but the initiation for such a program was most likely from President Carter's Secretary of Defense, Harold Brown.

⁸³Department of the Air Force, "Strategic Programs", "Statement of General John T. Chain (USAF), Commander in Chief Strategic Air Command and Director of Strategic Target Planning", 7 March 1990, p 2.

Defense Secretary Brown's report to the Congress in 1982 outlined Presidential Directive No.59 and the "countervailing strategy". The report stated:

Our countervailing strategy--designed to provide effective deterrence--tells the world that no potential adversary of the United States could ever conclude the fruits of his aggression would be worth his own costs. This is true whatever level of conflict contemplated. To the Soviet Union, our strategy makes clear no course of aggression by them that led to use of nuclear weapons, on any scale of attack and at any stage of conflict, could lead to victory, however they may define victory. Besides our power to devastate the full target system of the USSR, the United States would have the option for more selective, lesser retaliatory attacks that would exact a prohibitively high price from the things the Soviet leadership prizes most--political and military control, nuclear and conventional military force, and the economic base needed to sustain a war...The essence of the countervailing strategy is to convince the Soviets that they will be successfully opposed at any level of aggression they choose, and that no plausible outcome at any level of conflict would represent "success" for them by any definition of success.⁸⁴

From his description and objectives of a countervailing strategy, Secretary Brown's report further suggested that there were five basic elements to our force employment policy to achieve the objectives of the strategy: flexibility, escalation control, survivability and endurance, targeting objectives, and reserve forces.⁸⁵ It appears evident that this new strategy was to be the guide President Reagan was going to follow in announcing his strategic modernization program for all three legs of the

⁸⁴Department of Defense, *Report of Secretary of Defense Harold Brown to the Congress on the FY 1982 Budget, FY 1983 Authorization Request and FY 1982-1986 Defense Programs*, 19 January 1981, pp 39-40. This report reflects the FY 1982 Defense Budget as of January 16, 1982.

⁸⁵*Ibid.*, pp 40-42. For a complete explanation of each element see the entire statement of Secretary Brown from page 40 to 42. Also, Secretary Brown emphasizes that the countervailing strategy is consistent with a policy of "flexible response" for NATO.

strategic nuclear Triad. The announcement of the strategic modernization program was announced in the fall of 1981 but was formally presented in the 1982 report to the Congress by the new Secretary of Defense, Caspar Weinberger.

Secretary Weinberger's report explained that President Reagan's comprehensive program was based on a long-term view and required modernization of not just one strategic weapon system, but modernization of all the major components at the same time. This meant the Administration had to decide on the appropriate method to expand or replace the elements of the strategic Triad--ICBMs, SLBMs, and Strategic Bombers. Secretary Weinberger added that the Reagan Administration's opportunity to modernize the entire strategic nuclear Triad was advantageous in eliminating some dangerous contradictions between weapon capabilities and the objectives of our policy.⁸⁶

Secretary Weinberger also stated that modernization of the strategic nuclear forces was needed to end the decline of United States capabilities relative to Soviet forces and create a more stable deterrent than formerly had existed. He further explained that the modernization was affordable and, by specifically designing the program for both near term and long-term, the United States would remain secure. Secretary Weinberger's statement with regard to these issues was:

⁸⁶Department of Defense, *Report of Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1983 Budget, FY 1983-1987 Defense Programs*, 8 February 1982, p I-18. This report reflects the FY 1983 Defense Budget as of January 31, 1982.

Our strategic program is affordable, it fits within the amounts decided upon in March 1981 for strategic programs for the next six years...President Reagan's program for strategic forces, while consuming less than 15 percent of defense spending over the next five years, will give us the greatest addition of modern, strengthened strategic forces planned and funded by any United States President...The period in the Mid-1980s when major and critical components of our present strategic deterrent forces could be destroyed by an enemy surprise attack is our most vulnerable period...That is why parts of this program are specifically designed to secure additional strength for the near term, while at the same time we build the long-term strategic forces we need but cannot deploy until the end of the 1980s.⁸⁷

With an explanation of why we needed to modernize the strategic forces and the belief that the modernization was affordable, Secretary Weinberger explained the elements of the program. President Reagan's program consisted of five mutually reinforcing elements: 1) improvement of United States communications and control systems; 2) modernization of our manned strategic bomber force so that it retains the capability to penetrate Soviet air defenses; 3) deployment of new, more accurate, and more powerful submarine-launched missiles--the most survivable of our nuclear offensive systems; 4) a step-by-step plan to improve the survivability and accuracy of new land-based intercontinental ballistic missiles (ICBMs) and to reduce their vulnerability; and 5) improvement in strategic defenses.⁸⁸

President Reagan's plan for modernization of the strategic nuclear Triad is best summarized by Secretary Weinberger in his book *Fighting for*

⁸⁷Ibid., p I-39.

⁸⁸Ibid., pp I-39 and 40. For an in-depth description of President Reagan's program, Secretary Weinberger's report from page I-39 to I-42 provides the specific details of the modernization of each leg of the strategic nuclear Triad.

Peace. With regard to the strategic nuclear force, Secretary Weinberger described the energies of the Reagan Administration for the first two years as:

...regaining offensive deterrent strength--and that meant modernizing and strengthening all three legs of our strategic nuclear triad. The effort required the development and deployment of the B-1 and Stealth bombers to replace the B-52, the MX to replace the Minuteman, and the D-5 submarine launched missile to replace the earlier, less accurate missiles that lacked also the capability of destroying hardened Soviet military targets. That program faced no opposition within the Administration; and generally, with the exception of the MX missile, the modernization effort was supported as well by the Congress.⁸⁹

Of course, Secretary Weinberger's assessment with regard to the MX and its lack of full support by the Congress was to be amplified in the Scowcroft Commission's recommendations.

In 1982, the Scowcroft Commission was established by the White House to assess the same strategic nuclear problem that had been addressed by DoD and Secretary Weinberger. The Scowcroft Commission report was completed in April 1983 and, as previous reports, it supported a strategic nuclear Triad. The report stated that the Triad served several purposes, but three points were highlighted: first, the existence of several components to the strategic Triad forced the Soviets to solve a number of different problems and then plan to overcome; second, different components would require the Soviets in an all-out attack to make choices of which targets to attack, therefore reducing the effectiveness against one component to attack another; and third, each component of the strategic

⁸⁹Caspar W. Weinberger, *Fighting for Peace: Seven Critical Years in the Pentagon*, p 301. Additionally, former Secretary Weinberger elaborates on discussions by members of Congress concerning the Strategic Bombers and the MX missile. pp 301-303.

forces has an unique characteristic which is not found in the other components.⁹⁰

With these purposes for a varied strategic nuclear force, the Scowcroft Commission assessed each component of the strategic nuclear Triad and made recommendations for the future strategic Triad. The Scowcroft Commission recommended that the sea-based leg should continue with the Trident submarine construction program, and the Trident II (D-5) ballistic missile should be continued with high priority; also the report recommended development of a small submarine in case an Anti-submarine warfare (ASW) technological breakthrough developed. As far as the Strategic Bomber leg was concerned, the Scowcroft Commission did not recommend any changes but did recognize the bomber leg provided mutual support to the survivability of the ICBM force. Lastly, the Scowcroft Commission addressed the ICBM issue in a manner to describe the three main strategic purposes of the ICBM programs and then explain in detail a new modernization program for the future.⁹¹

It is my opinion, from the decision by the Scowcroft Commission to discuss the ICBM program in detail, that the ICBM program's volatile future was recognized. The Scowcroft Commission recommended three areas for modernizing the United States' ICBM force. First, the engineering design should be initiated on a single-warhead ICBM weighing about fifteen tons with full-scale development in 1987 and initial operating capability

⁹⁰White House, *Report of the President's Commission on Strategic Forces* (Scowcroft Commission), April 1983, pp 7-8.

⁹¹*Ibid.*, pp 10-22.

(IOC) in the early 1990s. Second, 100 MX missiles should be deployed in existing MINUTEMAN silos for modernizing of the ICBM force. Third, a specific program to resolve the uncertainties regarding silo and shelter hardness should be undertaken, leading to decisions about hardening MX in silos and deploying a small single-warhead ICBM in hardened silos or shelters. Also, investigation should proceed on different types of land-based vehicles and launchers, including hardened vehicles.⁹²

From reviewing the initiation of the modernization of the strategic nuclear Triad under the guidance of the Reagan Administration from 1981 to 1983, it is possible to determine that the same problems are being encountered by the Bush Administration in 1990. The main problem is deciding on the issue of an ICBM for the strategic nuclear Triad for the future. As Secretary Weinberger's book implies, the decision of the Scowcroft Commission to compromise on MX and suggest development of the single-warhead missile, the so-called Midgetman, has given opponents a method of opposing ICBM modernization. Specifically, Secretary Weinberger stated:

The Midgetman was a favorite missile of the MX opponents--primarily, I always felt, because it was easier for them to support a missile we did not, and would not, have for several years.⁹³

⁹²Ibid., pp 10-22. For further analysis on the Scowcroft Commission's report, see the Section on the Strategic Modernization Programs. This section describes each leg of the strategic Triad and provides both overall and detailed recommendations for improving the United States strategic nuclear Triad..

⁹³Caspar W. Weinberger, *Fighting for Peace: Seven Critical Years in the Pentagon*, p 303.

With the earlier events of the modernization program in mind and General Scowcroft being selected as National Security Adviser to President Bush, it was inevitable that a new strategic nuclear review was going to be conducted.

B. PRESIDENT BUSH'S STRATEGIC REVIEW

President Bush directed an early strategic nuclear review for possibly two reasons. The first reason was President Bush wanted a review conducted of the United States negotiating position with regard to strategic nuclear weapons before the START Treaty negotiations would resume. The second reason for the review was that the Bush Administration was required to make an early decision on the ICBM issue. Congress had voted in the 1989 Defense Authorization to require President Bush to decide by February 15, 1989 between additional research on the rail-mobile MX or to divert funds for deploying single-warhead road-mobile Midgetman missile.⁹⁴ As may have been expected, the deadline for the announcement was delayed until the Bush Administration completed its review of United States strategic policy in what was called National Security Review 12.⁹⁵

⁹⁴Jeffrey Smith, "Early Deadlines on Arms Issues", *Washington Post*, 28 November 1988, p 2. This report highlighted that General Scowcroft was a long time supporter of the Midgetman program as well as ranking members of the Democratic Party in Congress. The article also stated that Bush's campaign advisers had said the President-elect was leaning toward the MX rail-mobile. From this article in late November 1988, the stage was set for requiring a new strategic review for the Bush Administration.

⁹⁵Jeffrey Smith, "Bush Will Miss Deadline on Land-Based Missile Pick", *Washington Post*, 15 February 1989, p 17. Also George C. Wilson, "Military Budget to Precede Strategic Review", *Washington Post*, 10 April 1989, p 17. These two articles described the issue of choosing a new mobile missile as continuing to be at the center of controversy between the Department of

For a complete understanding, it should be realized that during the same time period the strategic review was being conducted; the defense budget was being debated before Congress for approval. From this situation, it may be ascertained that any recommendations from National Security Review 12 would not affect the budget, but the budget may affect the recommendations of the strategic review. This procedure may be known as the "cart-before-the-horse" with regard to budget first and strategy second, and was most likely the subject of new Secretary Cheney's statement in April 1989:

Given the ideal world we'd have a nice, neat, orderly process. We'd do the strategy and then we'd come around and do budget. This city doesn't work that way.⁹⁶

Secretary Cheney's statement acknowledged the overall impact that the budget has on strategy. Therefore, the recommendations of the Bush Administration's strategic review of not solely committing to either the MX or the Midgetman mobile system was probably as much a budget decision as a strategy decision.

In July 1989, DoD submitted to Congress its report to comply with the FY-89 National Defense Authorization Act. DoD's report reflected the Bush Administration's policy towards the modernization of the strategic nuclear Triad in a post-START environment. The report stated:

Defense and the desires of General Scowcroft and ranking members of Congress. Therefore, no consensus agreement could be reached by the deadlines that had been established by the 1989 Defense Authorization.

⁹⁶George C. Wilson, "Military Budget to Precede Strategic Review", *Washington Post*, 10 April 1989, p 17.

While we have made no final decisions about the force allocation among the various legs of the Triad, the Administration strongly believes that continued modernization is absolutely essential for our national security and that a fully modernized strategic Triad must provide the basis of all START force structure options. The recapitalization of our strategic Triad must proceed with or without a START treaty in order to replace or supplement aging systems with modern weapons. In this regard, deployment of the Trident SSBN, D-5 SLBM, the Peacekeeper missile in rail-garrison, the new small ICBM, B-2, ACM, and SRAM II are all essential and must continue on schedule.⁹⁷

The essence of the report is reflected in the list of components of the strategic nuclear Triad that should be supported in the future. It may be argued that the DoD report was completed before the historical events of the last half of 1989, and the support for all these components have changed. Of course, this is not the case because the modernization of a full strategic nuclear Triad is continuing to be supported in reports by the Bush Administration.

The fact that the Bush Administration maintains a firm commitment to the strategic nuclear Triad and a full modernization program is firmly stated in President Bush's 1990 report on "National Security Strategy of the United States". President Bush's report advocates that full modernization of the offensive components of the strategic nuclear Triad is required by stating:

Decisions on strategic modernization that I have already made take advantage of the most promising technologies in each leg of our Triad to increase stability. The B-2 bomber will ensure our ability to penetrate Soviet defenses and fulfill the role the bomber force has played so successfully for forty years. The D-5 missile in Trident submarines will exploit the traditionally high survivability of this

⁹⁷Department of Defense, *Report to the Congress on the Analysis of Alternative Strategic Nuclear Force Postures for the United States Under a Potential START Treaty* (Unclassified Version), July 1989, p 2.

leg and add a significant ability to attack more hardened targets. In a two-phase program for our ICBM force, the deployment of the Rail Garrison System will enhance stability by removing Peacekeeper missiles from vulnerable silos and providing the mobile capability we need for the near term. In the second phase, deployment of the small ICBM road-mobile system will further strengthen stability and increase force flexibility...While we ensure that each leg of the Triad is as survivable as possible, the existence of all three precludes the destruction of more than one by surprise attack and guards against a technological surprise that could undermine a single leg.⁹⁸

The conviction of President Bush in his support for modernization does not appear to reflect any plan to decrease the components of the future strategic nuclear Triad of the United States. To the contrary, it appears from President Bush's guidance in his 1990 national security strategy and the DoD report from July 1989 that the Administration is still proposing to expand the strategic nuclear Triad by developing both the mobile MX and Midgetman missile systems. This assessment may be substantiated from reviewing Defense Secretary Cheney's report to the President and the Congress for 1990, which states that one of the four guiding priorities for development of the FY 1991 budget request is the strategic nuclear modernization program.⁹⁹ Additionally, Defense

⁹⁸White House, *National Security Strategy of the United States*, March 1990, p 24.

⁹⁹Department of Defense, Secretary of Defense Dick Cheney, *Annual Report to the President and the Congress*, January 1990, p 9. Also see Department of Defense, "Statement of the Secretary of Defense Dick Cheney Before the Senate Budget Committee in Connection with the 1991 Budget for the Department of Defense", 5 February 1990, pp 5-6. Department of Defense, "Department of Defense Fiscal Year 1991 Budget: A Briefing by Dick Cheney, Secretary of Defense", 29 January 1990, pp 9-10. These two reports also list modernization of strategic nuclear forces as one of the FY 1991 budget priorities but both these reports show strategic modernization as one of six priorities to reflect changes that occurred with regard to budgetary constraints after Defense Secretary Cheney's

Secretary Cheney's budget for the offensive strategic nuclear Triad in FY 1991 included requests for funding specific components of each leg: the 18th Trident submarine and 52 Trident II missiles; special trains for the Peacekeeper missile and continued development of the small ICBM; and 5 B-2 stealth bombers and 100 advanced cruise missiles.¹⁰⁰

From the commitment that the Bush Administration has maintained for the strategic nuclear Triad from its strategic review in mid-1989 to testimony by Secretary of Defense Cheney as current as March 1990, the ever-present policy has continued to be a full modernization of the strategic nuclear Triad. With this in mind, a brief overview of the modernization of each leg of the strategic nuclear Triad will be provided, since the purpose of this study is to determine policy, not conduct a technological review and assessment.

C. OVERVIEW OF STRATEGIC NUCLEAR TRIAD SYSTEMS UNDER MODERNIZATION

For the purposes of this study, an overview of each of the legs of the strategic nuclear Triad will be conducted. This section will focus on the attributes of each leg and the capability that each leg provides. Of course, the most influential description of each leg of the Triad comes from the responsible service for a particular leg. With this in mind, the

annual report had been printed.

¹⁰⁰Department of Defense, "Statement of the Secretary of Defense Dick Cheney Before the Senate Budget Committee in Connection with the FY 1991 Budget for the Department of Defense", 5 February 1990, p 10. Also see Department of Defense, Office of Assistant Secretary of Defense (Public Affairs), "FY 1991 Department of Defense Budget Request", 29 January 1990, p 4.

descriptions of each leg of the United States strategic nuclear forces for the future will be based on posture statements and testimony of the senior officials in the respective service--Air Force or the Navy.

1. Land-based Ballistic Missiles

The land-based ballistic missile forces for the United States are built on the concept of Intercontinental Ballistic Missiles (ICBMs). In *The United States Air Force Report to the 101st Congress of the United States of America* for FY 1991, the Air Force describes the ICBMs as:

...the most responsive element of the Triad. ICBMs have nearly a 100-percent alert rate and comprise nearly half of the nation's day-to-day alert weapons. They are capable of prompt response and can hold the hardest of the high-priority, time-sensitive, high value Soviet warfighting assets at risk, including command and control facilities and ICBM silos. The silo-based ICBM's relatively low operation and maintenance costs, high reliability, secure and highly confident connectivity, planning flexibility, quick response time, and sovereign basing distinguish it among the strategic forces.¹⁰¹

It must be remembered that the United States' position with regard to a START Treaty is to limit the fast-flying and first strike capable ballistic missile force. From the Air Force's statement of the benefits of ICBMs, it appears that our negotiating position and reason for having ICBMs are going to oppose each other with a START Treaty.

Of course, the issue which is the focus of discussion concerning ICBMs is mobile basing. As described earlier, the United States has been attempting to determine the best weapon system to fulfill this requirement

¹⁰¹Department of the Air Force, *The United States Air Force Report to the 101st Congress of the United States, Fiscal Year 1991*, p 22. Also see Department of the Air Force, *Air Force Issues Book, 1989*, p 22. These two reports provide further descriptions of the importance and why overall modernization of the ICBM force is needed for the future.

since 1981. Presently, the discussion continues to focus on the rail-mobile MX, with its multiple warheads, and the road-mobile Midgetman, with its single warhead. As previously mentioned, the Midgetman has been supported by General Scowcroft (President Bush's National Security Adviser) and by the chairmen of the two armed service committees (Sen. Sam Nunn and Rep Les Aspin). In the June 26, 1989 issue of the *U.S. News & World Report*, it was reported that both Sen. Nunn and Rep. Aspin favored the Midgetman with its "extravagant price tag" because they believed the MX could not move quickly enough to avoid a surprise attack.¹⁰² Also earlier in 1989, Rep. Aspin had reportedly stated placing MX missile on rails was contingent upon building the Midgetman as well.¹⁰³

As far as support for the MX, it has been from DoD and the Air Force. In the same report that Rep. Aspin had tied Midgetman to MX, the Air Force leaders and in particular General Larry D. Welch, Chief of Staff for the Air Force, were acknowledging that most likely only one mobile missile system would be built; therefore, the Air Force preference was the MX.¹⁰⁴ Additionally, the Air Force's report to Congress for FY 1991 supported the Peacekeeper Rail Garrison as the method of modernizing and making ICBMs more survivable by stating:

Operationally and fiscally, this is the most effective way to obtain a modernized, more survivable ICBM force. Rail Garrison can respond

¹⁰²Richard Perle, "Defending People by Defending Rockets", *U.S. News & World Report*, 26 June 1989, pp 39-40.

¹⁰³George C. Wilson, "Air Force Acts to Break Impasse: New Options Offered on MX, Midgetman", *Washington Post*, 24 March 1989, p 1.

¹⁰⁴*Ibid.*

immediately to a highly unlikely "bolt-out-of-the-blue" attack with its low-cost, nearly 100-percent peacetime alert mode and ability to launch directly from garrison.¹⁰⁵

The heated and diverse discussion over the MX and Midgetman as the mobile ICBM for the future has consequently resulted in neither system being deployed as of yet. This lack of consensus highlights Secretary Weinberger's statement that the Midgetman came into existence as opposition to the MX.¹⁰⁶ Thus, the Midgetman has been possibly viewed with the philosophy of being so far in the future that it would never reach development. Ultimately, the outcome would be that mobile ICBMs would not be deployed and the most likely rationale was stated by Ambassador Paul Nitze in his book *From Hiroshima to Glasnost*. Ambassador Nitze stated:

A number of proposals had been put forward in interdepartmental meetings to increase the power and, more importantly, the survivability of U.S. ground-based retaliatory forces. Each of the proposals, however, ran into strong opposition. With respect to *mobile systems* the difficulty revolved around the interface between such systems and the public--people just don't like to have missiles with nuclear warheads moving about the countryside near their homes and workplaces.¹⁰⁷

¹⁰⁵Department of the Air Force, *The United States Air Force Report to the 101st Congress of the United States of America, Fiscal Year 1991*, p 24. See also Department of the Air Force, *Air Force Issues Book, 1989*, pp 23-24. Both reports advocate that the Midgetman would compliment the MX, but if the choice has to be made between the two systems the Air Force supports the MX.

¹⁰⁶Caspar W. Weinberger, *Fighting for Peace: Seven Critical Years in the Pentagon*, p 303.

¹⁰⁷Paul H. Nitze, *From Hiroshima to Glasnost* (New York: Grove Weidenfeld, 1989), p 400. The italics and bold face was added to the quote by myself to add emphasis. It is my firm belief that Ambassador Nitze's statement is absolutely true. Not unlike the Europeans, with regard to the now INF banned GLCMs, the United States public does not want

From this discussion, it is my opinion that the future of mobile ICBM systems is going to remain a subject for controversial debate. Consequently, the United States mobile systems will continue to be stretched-out in budget discussions with a long-term desire of limiting or banning mobile ICBMs.

2. Sea-based Ballistic Missile Components

The sea-based leg of the United States strategic nuclear Triad is composed of two components: the nuclear-powered ballistic missile submarine (SSBN) and its Submarine Launched Ballistic Missile (SLBM). As far as the strategic modernization program is concerned, the current and future program associated with both components of the sea-based leg is referred to as the Trident program. The Trident program has become the focal point of the future strategic nuclear force structure because of its overall survivability and new weapon capabilities of the Trident II (D-5) missile to attack hardened targets. These two capabilities have stimulated considerable debate over the possibility of the SLBM being able to replace the ICBM and ultimately changing the strategic nuclear force structure from a Triad to a Dyad.

When reviewing the contributions of the sea-based leg of the strategic nuclear forces, the Navy's opinion is best described in the Navy's report to the Congress for FY 1990 and 1991 by Secretary of the Navy H. Lawrence Garrett, III. In the report, Secretary Garrett states:

to see vehicles loaded with nuclear missiles being dispersed into the countryside. Additionally, this attitude will only get stronger against mobile systems as the public senses a continued lessening of world tension especially with the Soviet Union.

The U.S. ballistic missile submarines (SSBNs) at sea are the most *survivable* and *cost effective* leg of the strategic triad. The continued modernization of a *secure* sea-borne retaliatory force with communications reliability comparable to land-based systems is vital to American strategic security. Modernization of the SSBN force with new Trident submarines and D-5 missiles is underway, on time and on budget...Submarine-based missile systems offer another benefit in wartime as a means for augmenting or reconstituting space-based systems. Moreover, sea-borne systems, with their inherent mobility and freedom from base or overflight restrictions, hold great promise as cost-effective, flexible, and survivable platforms to support our strategic defenses and provide means to counter enemy space systems.¹⁰⁸

From Secretary Garrett's statement, two areas are specifically addressed when discussing the sea-based leg of the strategic nuclear Triad. The first area concerns the strengths of the sea-based leg which are the cost-effectiveness and the overall survivability. In a prepared statement before the House Appropriations Defense Subcommittee. Admiral Trost stated:

Our nation's dependence on this force will grow in a post-START environment. The TRIDENT missile-carrying submarine is reaching maturity at precisely the right time in our nation's history to enable us to safely weather the period of strategic and defense uncertainty that lies ahead. Providing nearly 50% of the nation's strategic warheads for only 25% of the total strategic cost, the potent and extraordinarily accurate TRIDENT/D-5 system will, for the foreseeable future, remain the most cost-effective and survivable element of the nation's strategic deterrent capability.¹⁰⁹

¹⁰⁸Department of the Navy, "A Report by the Honorable H. Lawrence Garrett, III, Secretary of the Navy, on the Posture and Fiscal Years 1990-91 Budget of the U.S. Navy and Marine Corps", *Department of the Navy Report to the Congress, Fiscal Years 90-91*, pp 8-9.

¹⁰⁹Admiral Carlisle A.H. Trost (USN), "Statement by Admiral C. A.H. Trost, U.S. Navy, Chief of Naval Operations, Before the House Appropriations Defense Subcommittee on the Posture and Fiscal Year 1991 Budget of the United States Navy", 22 February 1990, p 13. Also see Department of the Navy, "Prepared Statement by The Honorable H. Lawrence Garrett, III, on the Posture and Fiscal Year 1991 Budget of the U.S. Navy and Marine Corps", pp 2-3. Both statements make the issue of the sea-

Admiral Trost's statement highlights the cost-effectiveness of the Trident program and is undoubtedly a major factor for the program not being under constant attack as the other legs have been during the modernization of the strategic nuclear Triad. Also, the Trident program has been able to maintain its schedule of development and achieve operational certification of the D-5 missile¹¹⁰.

The second area of discussion with regard to the sea-based leg is its connectivity for communications. This area is most usually labelled as a negative point and the main argument against the SSBN force replacing land-launched ICBMs. The Navy's position to this argument is that the communications to SSBNs are redundant and timely. In a statement before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee, Vice Admiral Daniel L. Cooper (USN), Assistant Chief of Naval Operations (Undersea Warfare), stated:

The strategic submarine force is controlled through a reliable, redundant, continuous and reconstitutable communication system. Comprehensive evaluations prove the SSBN's ability to maintain

based leg providing 50% of the deliverable strategic warheads for 25% of the strategic budget. Additionally, Secretary Garrett suggests that the new, more accurate, and long-range D-5 missile will serve our deterrent needs well in an era of sharply reduced strategic inventories. The important difference between the two statements is that Secretary Garrett does not mention the START Treaty, but just says in an era of reduced strategic inventories. This could be a subtle indication of changes to come whether START happens or not.

¹¹⁰... , "Nuclear Sub Launches Tridents", *The Monterey Herald* (AP), 13 February 1990, p 2. Also see William Matthews, "Another Bust for Trident II", *Navy Times*, 28 August 1989, p 25. As with all programs, the D-5 encountered flight tests problems in March 1989 and August 1989, but the Navy was able to correct the problem with minor delays. When the USS Tennessee fired two missiles in 20 seconds in February 1990, the Tennessee was certified to deploy with the D-5 Missile on operational patrol.

continuous communications with the National Command Authority. Our communication program will promote crisis stability by assuring that National Command Authority orders can be delivered before, during or after a nuclear attack on the United States.¹¹¹

As might be expected from review of the past¹¹², the debate over connectivity with SSBNs will continue. Also, it must be mentioned that Captain James R. Lynch (USN) believes the communication capability with the SSBNs is timely enough for a prompt response. Captain Lynch, when referring to improved communication capabilities and the alteration of U.S. SSBN operating areas, stated:

As a result of all this, the submarine-launched ballistic missile (SLBM) can now deliver a prompt response, a capability previously the sole domain of the intercontinental ballistic missile (ICBM).¹¹³

¹¹¹Vice Admiral Daniel L. Cooper (USN), Assistant Chief of Naval Operations (UNDERSEA WARFARE), "Statement of Vice Admiral D. L. Cooper, U.S. Navy, Assistant Chief of Naval Operations (UNDERSEA WARFARE) Before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee on Status of Submarine Force", 7 March 1990, pp 12-13.

¹¹²Rear Admiral William J. Holland, (USN, Ret), "The Link to the Boomers: The Triad's Best", *U.S. Naval Institute Proceedings*, January 1988, pp 41-50. Richard B. Kelley, "The Link to the Boomers: A Bad Connection", *U.S. Naval Institute Proceedings*, January 1988, pp 41-51. Also see Rear Admiral William J. Holland, Jr. (USN, Ret), "The End of the Triad? Why SSBN Advances Make a Dyad Possible", *Arms Control Today*, September 1989, pp 10-14. The discussion in the two articles in the January 1988 issue of *Proceedings* is typical of the debate over SSBN connectivity. Of course, Rear Admiral Holland's experience with dealing with the communications of a SSBN does give credibility to his support for SSBNs. Also, Rear Admiral Holland's article in the September 1989 issue of *Arms Control Today* states that there is no practical difference between the reliability and speed of communications with SSBNs and any other leg of the Triad.

¹¹³Captain James R. Lynch (USN), "Triad or Dyad", *U.S. Naval Institute Proceedings*, January 1990, p 62.

Although it is only my opinion, the communications with the SSBNs is highly efficient and should not affect a future decision to alter the strategic nuclear force structure of the United States.

It is recognized that one area has not been addressed with regard to the survivability of the SSBN. The issue concerns the possibility of an "ASW breakthrough" in the future. As in the past, it is the opinion of the Navy that an ASW technology breakthrough is not in the foreseeable future. Specifically addressing the issue of a technological breakthrough, Vice Admiral Cooper stated before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee:

The combination of technical advances with changes to operational and tactical procedures, all under constant review, continues to guarantee the survivability of our sea based strategic forces...Independent conclusions consistently agree: There is no scientifically plausible prospect for an ASW technology breakthrough which would provide a basis for a threatening attack on our SSBN forces through the 1990s and probably well beyond.¹¹⁴

Finally, it is my opinion that the sea-based leg of the strategic nuclear Triad has increased in stature with the strategic nuclear modernization program. The modernization program has continued with the construction of Trident SSBNs and has been responsible for the development and deployment of the Trident II (D-5) missile. Other improvements such

¹¹⁴Vice Admiral Daniel L. Cooper (USN), "Statement of Vice Admiral D. L. Cooper (USN), Assistant Chief of Naval Operations (UNDERSEA WARFARE) Before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee on Status of Submarine Force", 7 March 1990, p 14. Also see Rear Admiral J. Holland, Jr. (USN Ret), "The End of the Triad? Why SSBN Advances Make a Dyad Possible", *Arms Control Today*, September 1989, p 14. Captain James R. Lynch (USN), "Triad or Dyad", *U.S. Naval Institute Proceedings*, January 1990, p 62.

as communication capabilities have also contributed to the ascent of the sea-based leg of the strategic nuclear Triad. With all the factors that have been presented, it appears that the sea-based leg will become the premier leg of the future strategic nuclear forces of the United States.

3. Strategic Bombers

The Strategic Bomber leg of the strategic nuclear force has been under considerable scrutiny and controversy during the strategic modernization program. The controversy has centered on the requirement for manned bombers, especially the B-2 (Stealth Bomber). A current explanation for manned bombers has been supplied by General Chain, Commander-in-Chief of SAC and Director of Strategic Target Planning, when he stated that national guidance required the U.S. strategic forces must hold several targets at risks. These targets may vary from either being time sensitive, highly defended, "hard" targets, or mobile (which is officially referred to as relocatable). Consequently, General Chain states the operational targeting philosophy as:

We are careful not to be completely reliant on any one system for all targets in a specific group. This is because no system in the Triad is, or ever will be, perfect--the probability of arrival of any weapon is always less than one. Therefore, to ensure success we use weapons from more than one leg of the Triad against very important targets...Except for those targets which must be hit quickly, all target groups can be and are targeted with bombers. In other words, a significant portion of the Soviet target base can be struck with a bomber weapon. In addition, a number of targets fall into a category we call "look-shoot" targets...The manned penetrating bomber is ideally suited for targets in the look-shoot category. In this case the bomber flies to the target. Depending on the damage observed by the crew, they can strike it with a very accurate gravity bomb or

short range attack missile or pass by it and go to the next assigned target.¹¹⁵

General Chain's statement is vital to the understanding of why he feels the United States should continue to update the strategic bomber forces. Additionally, it may be ascertained from his statement that strategic bombers have an inherent ability to be flexible and adapt to a dynamic wartime scenario.

In its report to Congress for FY 1991, the Air Force has amplified General Chain's description by highlighting the flexibility aspect of the bomber leg as:

Bombers are the most flexible leg of the strategic Triad. They can be launched to either increase their survivability or to signal national resolve during a time of national crisis before a decision is made to employ weapons. They can be redirected or recalled, accomplish attack assessment, and be reconstituted for follow-on missions. Additionally, bombers offer the best potential for searching out and striking relocatable targets.¹¹⁶

Additionally, the Air Force advocates in the "Air Force Issues Book, 1989" that manned bombers can carry a large number and variety of nuclear and conventional weapons, attack widely separated targets, and engage imprecisely located targets by using aircraft sensors to determine target location.¹¹⁷ From these statements, it is obvious that the Air Force

¹¹⁵Department of the Air Force, "Strategic Programs", "Statement of: General John T. Chain, Jr. (USAF), Commander-in-Chief Strategic Air Command and Director Strategic Target Planning", 7 March 1990, p 11.

¹¹⁶Department of the Air Force, *The United States Air Force Report to the 101st Congress of the United States of America, Fiscal Year 1991*, p 24. Also see Department of the Air Force, *Air Force Issues Book, 1989*, p 25.

¹¹⁷Department of the Air Force, *Air Force Issues Book, 1989*, p 25.

believes it is essential to maintain a highly sophisticated bomber force to penetrate air defenses, conduct high yield strategic nuclear weapon attacks, and verify attacks on important targets.

For the Air Force to accomplish these missions with their strategic bombers, the Air Force has concentrated on deploying two bombers during the strategic modernization program to ensure all operational requirements will be met in the future. First, the B-1B has been developed and deployed since the Reagan Administration announced its strategic nuclear modernization program in the early 1980s. The B-1B was developed as a 100 aircraft program to satisfy the strategic bomber requirement in the mid-1980s to the mid-1990s. The program has already accomplished its goal, and the B-1B has been fulfilling the Single Integrated Operations Plan (SIOP) alert commitments since October 1, 1986.¹¹⁸

According to the Air Force, the B-1B performs the penetration of a manned bomber better than any other operational aircraft in the world. The B-1B will penetrate with a typical profile of 200 feet above ground level at speeds in excess of 600 miles per hour for both flat/rolling and mountainous terrain. Of course, the development has not been without problems. The flight tests revealed an Electronic Countermeasures (ECM) problem which has been traced to a basic deficiency in the design of the defensive avionics system. The Air Force has initiated a program to

¹¹⁸Department of the Air Force, *Air Force Issues Book*, 1989, pp 25-26.

alleviate the problem by installing a stand-alone radar warning receiver.¹¹⁹ Even though the B-1B has had an ECM problem, the program appears to have been highly successful because the B-1B was able to achieve operational status and begin standing the SIOP alert in 1986. As far as the future of the B-1B, it will continue to be the front-line penetrating bomber for the foreseeable future. It should also be recognized that the conventional capability of the B-1B will provide a long-term mission option as the international environment changes.

The second strategic bomber to be developed under the strategic modernization program has been the B-2. The B-2 program has become the subject of considerable debate and was one of four aircraft programs now planned for acquisition to be reviewed by Secretary of Defense Cheney in early 1990¹²⁰. The primary focus of the B-2 debate is the cost of the program, for which DoD requested \$5.5 billion dollars for five aircraft in FY 1991.¹²¹ Even though the cost of the B-2 program has created an

¹¹⁹Department of the Air Force, *The United States Air Force Report to the 101st Congress of the United States of America, Fiscal Year 1991*, pp 25-26. Also see Department of the Air Force, *Air Force Issues Book, 1989*, pp 25-28. The *Air Force Issues Book, 1989* provides a more detailed description of the B-1B penetration capability and also discusses the ECM problem.

¹²⁰Department of Defense, "Statement of the Secretary of Defense Dick Cheney Before the Senate Budget Committee in Connection with the FY 1991 Budget for the Department of Defense", 5 February 1990, p 15. Also see Department of Defense, "Department of Defense Fiscal Year 1991 Budget: A Briefing by Dick Cheney, Secretary of Defense", pp 14-15. The four specific aircraft programs that Secretary Cheney ordered to be reviewed were the B-2, C-17, A-12 (ATA), and the Advanced Tactical Fighter (ATF).

¹²¹Department of Defense, "Statement of the Secretary of Defense Dick Cheney Before the Senate Budget Committee in Connection with the FY 1991

attitude of "sticker shock", the Air Force believes that the B-2 is essential to the future of the Strategic Bomber force.

General Chain stated the requirement for the B-2:

...as the Soviet defenses increase toward the turn of the century, the B-52s must transition to a standoff cruise missile role and the B-1B will have to be moved to less highly defended areas. Without the B-2, by the late 1990s we will only have 97 penetrating bombers and they will be effective only against lesser defended targets. We still will have to have a penetrating bomber to get into those highly defended areas where the targets the Soviets hold most dear are located--and that's where the B-2 stealth bomber will pay large dividends ...The B-2 is a warplane that will keep ahead of any adversary well into the next century and is a keystone in leveraging U.S. strength against Soviet weaknesses...I believe the B-2's unique capabilities will allow it to survive in highly defended regions and hold at risk a wide range of Soviet offensive and force projection forces on an enduring basis.¹²²

Additionally, General Chain emphasized the B-2 would promote strategic stability by being too slow for use as a first-strike weapon, but capable of rendering the other side's first strike as suicidal.¹²³ From the requirement behind the need for the B-2 in the future, the question to be answered is: what makes the B-2 so unique?

For the purposes of this review, the description of the B-2 in the Air Force's report to Congress for FY 1991 will be utilized.

Budget for the Department of Defense", 5 February 1990, Chart #13. Also see John Boatman, "Five B-2s Ordered, New Weasel Axed", *Jane's Defence Weekly*, 3 February 1990, p 179. In the February 3, 1990 issue of *Jane's Defence Weekly*, DoD's request for the B-2 program in FY 1991 was divided into a projected cost of \$3.8 billion for procurement and \$1.6 billion for R&D.

¹²²Department of the Air Force, "Strategic Programs", "Statement of: General John T. Chain, Jr. (USAF), Commander-in-Chief Strategic Air Command and Director Strategic Target Planning", 7 March 1990, p 13.

¹²³*Ibid.*, p 13.

According to the Air Force's report, the B-2's technology is a generational leap by:

...effectively integrating United States low-observable technologies (radar, infrared, electromagnetic, visual, and acoustic) into a large, aerodynamically efficient aircraft, creating a highly survivable bomber with long range and a heavy payload capacity. The B-2's low-observable characteristics significantly reduce the response time of enemy forces, providing the B-2 the best opportunity to penetrate sophisticated air defenses and attack targets with a wide range of weapons...The B-2 program is currently in its flight test phase. The first aircraft flew on July 17, 1989, and the flight test plan has continued on schedule.¹²⁴

The capability of the B-2 will only be realized as the flight test program continues. Afterwards, the decision on whether the B-2 has been a success or a budget disaster may be put forth.

Of course, it must be stated that the Air Force advocates the B-2 program will consume less of the defense budget over its procurement period (1.3 percent) than either the B-52 (1.4 percent) or the B-1B (1.6 percent).¹²⁵ Additionally, it should be remembered that the B-2 incorporates new technologies that must be absorbed into the cost of the program. The Air Force states that almost one-third of the cost of the B-2 program has been devoted to research and development, of which three-fourths has already been invested. Therefore, the Air Force's position on the cost of the B-2 program is that it should be compared in terms of flyaway costs, or the actual cost of producing one aircraft. On this basis, the Air Force calculations are a B-2 costs about \$274 million (FY

¹²⁴Department of the Air Force, *The United States Air Force Report to the 101st Congress of the United States of America, Fiscal Year 1991*, p 26.

¹²⁵Department of the Air Force, *Air Force Issues Book, 1989*, pp 27-28.

89 dollars) and the B-1B costs about \$228 million.¹²⁶ In my opinion, the potential capability of the B-2 in both a strategic nuclear role and a conventional role warrants the further development and deployment of the B-2.

In summary, the Strategic Bomber leg of the strategic nuclear forces will continue to be vital. Strategic bombers provide flexibility and are recallable after they have been launched. Additionally, the START Treaty counting rules are designed to favor the strategic bombers; therefore, it is imperative to the national security of the United States to deploy the most highly capable and technologically advanced strategic bombers. Of course, the B-2 is in this category and should be deployed as soon as feasible. However, if the technological benefits of the B-2 become unattainable, then the United States should be prepared to resume production of the supersonic B-1B. It is my opinion that whatever the changes may be in a future strategic nuclear force structure of the United States--strategic bombers will remain an integral part.

D. CONCLUSION

The modernization of the strategic nuclear forces of the United States will continue to be a priority, as it has been since President Reagan announced his strategic modernization program in 1981. The focus of the discussion on the modernization program will be on the individual components, not the overall requirement for modernizing strategic nuclear forces. Therefore, it is possible that an entire leg of the strategic

¹²⁶Ibid., pp 26-27.

nuclear Triad may be targeted for discussion or debate on viability. As the review of this chapter has shown, decisions which may lead to jeopardizing an entire leg of the strategic nuclear Triad would be counter to the stated guidance of both the Reagan Administration and the current Bush Administration.

The possibility of a debate on one entire leg is a real likelihood in the future. Although the case may be made, the United States strategic nuclear force structure has already become the target of restructuring. In actuality, except for deployment of silo-based MX, the United States has not gone forward on the modernization of the ICBM leg of the strategic Triad since the issue of mobile systems arose with the Scowcroft Commission. There are probably several reasons for the lack of commitment, but the most significant thought on the subject may have been Ambassador Nitze's statement that the United States general public does not want strategic nuclear missiles in the countryside. This line of thinking also contributes to Secretary Weinberger's feeling that people supported the Midgetman just to oppose the MX. Also, it must be remembered that the negotiating position of the United States has opposed fast-flying ballistic missiles, and before the Wyoming Ministerial in September 1989, the United States opposed mobile missiles. With these thoughts in mind, it would appear that the ICBM leg for the future may come into question.

In contrast, the sea-based and Strategic Bomber legs retain broad-based support and appear to be continuing with their modernization programs. Although the pace of the modernization is below the level of

initial programming, both of these legs have deployed systems outlined in the preplanned modernization program. The sea-based leg with the Trident SSBN and the Trident II (D-5) missile has been highly successful and appears destined to become the premier leg of the United States strategic nuclear forces for the future. Also, the Strategic Bomber leg has developed and deployed operationally the B-1B. It is recognized that the B-2 has and will continue to undergo difficulty with funding constraints, but the reality is that the program is currently test flying prototype B-2 aircraft. Therefore, it is my opinion that the B-2 will continue development, but as been suggested, in fewer numbers. Additionally, the START Treaty counting rules favor the United States continuing development of highly sophisticated and technological strategic bombers.

In summary, the United States strategic nuclear forces will continue as a priority for modernization to maintain strategic deterrence. The structure of the strategic nuclear forces may change, especially with the continual debate on a mobile ICBM. Consequently, the strategic nuclear Triad could be in for a possible restructuring, but it is unlikely this recommendation will come from Bush Administration, because of its continued declaratory support for the strategic nuclear Triad. Therefore, if such a recommendation is made in a time of decreasing defense budgets, it will most likely be the decision of Congress that requires a restructuring of the strategic nuclear force structure of the United States.

VI. CONGRESSIONAL INFLUENCE

The final and in my opinion most important contributing factor to decisions affecting the United States' strategic nuclear forces for the future is the influence of the United States Congress. It must be recognized that the influence of the Congress ranges over a wide spectrum of strategic decision-making for the national security of the United States. The Congress not only votes the final approval of the defense budget, but also has the final approval authority for ratification of treaties and foreign aid to countries that are deemed as vital to the national security of the United States. In essence, Congress' influence is not limited to a simple cause and effect of one factor such as the budget determining the final outcome, but rather the influence of Congress is varied. This variety of options permits Congress to enter the strategic decision-making process through an assortment of factors such as overall force levels, negotiating positions of treaties, and the preference for a certain weapon system type over another.

In my opinion, the Congress' ability to influence the entire spectrum must be realized and for this research will be referred to as "Congressional influence". The importance of Congressional influence must be realized from the exhausting process of defense related testimony presented before Congress. When issues or programs are presented before the Congress, salesmanship is required to ensure Congress is provided with information for making intelligent decisions on defense issues. Also, it

may be paramount to the future of a strategic program or component to highlight an issue or program's overall contribution to the national security of the United States.

It will be the intention of this chapter to demonstrate the importance of Congressional influence in determining the United States strategic nuclear force structure of the future. From a review of the sources utilized for this study, it should be readily apparent that the statements of current and former defense experts were prepared specifically for the United States Congress. Also, it must be recognized that the testimony before defense committees in early 1990 has been centered on the strategic nuclear Triad. The testimony has focused on the effect of a START Treaty on the daily changing international environment and the ultimate requirement of modernizing the individual components of the strategic nuclear forces. The Congressional influence will become even more apparent as the agreements of the 1990 Washington Summit come under review. Of course, it must be mentioned that the Congress has been reviewing the potential implications of a START Treaty since the spring of 1988.

In the first part of 1990, the Congress conducted a series of hearings which resemble similar hearings in May 1988. The 1988 hearings reflected the same basic theme and concern of the Congress as the current 1990 hearings. As Rep. Les Aspin, Chairman of the Armed Services Committee of the House of Representatives, opened the May 1988 Defense Policy Panel's hearings on U.S. Strategic Forces and START, Rep. Aspin stated:

...we are beginning a set of hearings in preparation for President Reagan's visit to Moscow to meet with General Secretary Gorbachev. In particular, we want to get an idea about where the START negotiations have gone; what is happening in regard to the force structure that accompanies our negotiating position in START; where we think the START agreement is going to go; how much progress might be made at the summit and other related questions.¹²⁷

Although two years have passed since the 1988 Moscow meeting, it is readily apparent that the same concerns of Congress in 1988 still exist prior to the 1990 Washington Summit. The 1990 hearings have been for the purpose of assessing the daily changes in the international environment as pertaining to the Soviet Union and Eastern Europe. Also, it must be believed that changes in the international environment and the signing of a START Treaty will undoubtedly impact the future strategic nuclear force structure of the United States.

With this in mind, a review of the previous chapters and the major points indicates the impact that the Congress may have on determining the United States strategic forces of the future. The review also highlights the requirement for recognizing the need for Congressional support and a willingness of the Bush Administration to work toward a position of cooperation. Additionally, it must be noted that the views of the Congressional leadership on defense issues are of major significance to the future of the defense program. This point is especially important

¹²⁷House of Representatives, Defense Policy Panel, "U.S. Strategic Forces and START", "Hearings Before the Defense Policy Panel of the Committee on Armed Services House of Representatives", 16 and 17 May 1988, p 1. The importance of this 1988 hearings is that the same type of hearings have been conducted by the Senate and House Armed Services Committees during the early part of 1990.

with regard to the views of defense leaders in Congress as pertaining to the strategic nuclear force structure in a post-START environment.

A. RECOGNIZING THE REQUIREMENT FOR CONGRESSIONAL SUPPORT

As has been presented earlier in this study, the previous factors have all related to either developing a position of cooperation between the executive branch and legislative branch or providing expert opinions to the Congress for a determination of the strategic nuclear forces of the future. Therefore, a brief review of the important aspects of how the requirement for Congressional support has affected the interrelationship of the previously presented factors of this study is warranted. The review will summarize the interrelationship of Congress to the four major areas introduced in preceding chapters: President Bush's national guidance; strategic threat; arms control and a START Treaty; and the strategic modernization program.

First, the desire to achieve Congressional support, which is a political reality of the United States, comes directly from President Bush in his 1990 report of the "National Security Strategy of the United States". President Bush clearly states the requirement for cooperation between the executive and legislative branches:

...in an era of rapidly changing strategic conditions, new openings for peace, continuing uncertainties, and new varieties of danger. We thus face new opportunities and new problems, both of which demand of us special qualities of leadership--boldness, vision, and constancy. It is my responsibility to meet the challenge, and I am

prepared to meet it in a spirit of close cooperation and consultation with Congress.¹²⁸

From President Bush's commitment to work with the Congress on national security strategy, it is only logical to believe that the Bush Administration's defense proposals would be oriented towards policies where compromise could take place with the Congress. Also, President Bush, as previous presidents before him, was most likely acknowledging that policies or defense programs that are not supported by Congress will be a wasted effort; therefore, it would be advantageous to develop programs in concert with the Congress rather than in a defense department vacuum.

Second, the strategic threat during the 1990 hearings has been presented to the Congress from two perspectives. The first perspective is DoD and especially Defense Secretary Cheney's viewpoint that the Soviet Union's strategic nuclear forces have not changed with regard to capabilities. This view by DoD is based on the fact that the Soviet Union is the only nation with the capability of destroying the United States. The second perspective is based on assessments of former defense department officials from previous administrations. It would appear that the focal point of the reevaluation is the opinion of former defense department hard-liners, such as Mr. Richard Perle on the changing environment.

¹²⁸White House, *National Security Strategy of the United States* March 1990, p 32. Also see footnote 12, President Bush's commitment to working with the Congress is asserted in his explanation of the Constitution giving the executive and legislative branches separate powers, but cooperation is required for a consensus on basic policy.

With Mr. Perle acknowledging changes in the Soviet Union and Eastern Europe, it may only be realistic to believe that the Congress will pursue options for possible changes in the United States strategic nuclear forces. Mr. Perle has indicated that deeper cuts of the United States' and Soviet Union's strategic arsenals should be made when he stated:

We can go significantly lower, probably to half the levels now contemplated...We have other requirements for our resources, even within the military, and I do not like to see us buy more than we need.¹²⁹

Of course, the decisions of the Congress on the future strategic nuclear force structure must take into consideration both perspectives.

Third, it must be considered that the Congress may view arms control and especially, a START Treaty as an opportunity for major changes in the future strategic nuclear Triad of the United States. The Congress and in particular, the Senate could delay or decide against ratification of the START Treaty if the position negotiated was diametrically opposed to the position of Congress. The perfect example of general guidance for a START Treaty was the conclusions of the Defense Policy Panel review in May 1988; the conclusions of the panel were:

In summary, U.S. strategic force structure planning under START should put a high premium on survivability, penetrability, coverage of Soviet targets and redundancy in our strategic forces. How much of each of these characteristics is enough for crisis stability with deep cuts in strategic forces is a complicated matter that must be

¹²⁹Michael R. Gordon, "Stocking the Atomic Arsenal: How Much Deterrence to Buy?", *New York Times*, 23 May 1990, p 1.

successfully resolved if there is to be a stable START agreement.¹³⁰

From these conclusions, it is readily apparent which issues the House Armed Services Committee deemed important for a stable START Treaty. Also, it would be logical that Congress will support the modernization of the strategic nuclear forces that possess the capabilities to meet these operational requirements. In my opinion, this statement is significant for support of forces that are flexible and provide multiple capabilities such as survivability and penetrability. The two legs of the Triad that best fit these requirements according to the Navy and Air Force would be SSBNs and Strategic Bombers. In my opinion, the Congress' position for a ratifiable START Treaty will determine the future strategic force structure of the United States.

When discussing arms control of the future, it is essential to discuss the future of SDI. This area of arms control is one that has been debated as possibly leading to violation of the ABM Treaty; therefore, the ABM Treaty might require modification or abolishment. It is believed that once Congress ratifies a treaty, it does not easily agree to violate or abandon the treaty. In the case of SDI, it may be advisable for a new strategy to be developed for Congress to support SDI in the future. Therefore, it may be believed that SDI negotiations will be conducted

¹³⁰House of Representatives, Defense Policy Panel, "Breakout, Verification and Force Structure: Dealing with the Full Implications of START", *Report of the Defense Policy Panel of the Committee on Armed Services, House of Representatives*, 24 May 1988, p 40. For a thorough account of the subjective matter, the entire publication is highly recommended for background on the START Treaty as pertaining to the critical issues of a potential START Treaty.

within the limits of the ABM Treaty or utilize new emerging threats, other than the Soviet Union to justify SDI deployment. This rationale would lead one to think that promoting SDI as a potential benefit for both the United States and the Soviet Union against nuclear and ballistic missile proliferation would be a plausible strategy for gathering congressional support.

Fourth, the strategic modernization program has been setback due to lack of consensus between the Congress and the Reagan and Bush Administrations. The primary focus of non-consensus is the ICBM program, which has been subjected to continual discussions on its survivability and mobility. As previously stated in the modernization chapter, the issue of modernizing the ICBM leg of the strategic Triad has been debated ever since the 1983 report of the Scowcroft Commission. The decision to deploy either the MX or Midgetman mobile system remains to be settled because of disagreement between the executive and legislative branches. If limited to one system, DoD and the Air Force continue to prefer the MX, but the Congress and in particular the two armed services chairmen (Sen. Nunn and Rep Aspin) maintain support for the Midgetman¹³¹.

Also, it has been reported that Sen. Nunn has warned that both MX and Midgetman will be rejected by Congress unless the Bush Administration proposes to ban the rail MX and the SS-24.¹³² In my opinion, the ICBM

¹³¹Robert C. Toth, "U.S. May Push Missile Ban at Arms Talks", *Los Angeles Times*, 31 March 1990, p 13.

¹³²*Ibid.* The article provides a further assessment that the message from Capitol Hill is a willingness to support the MX missile system, so a future ban could be proposed for the SS-24. Therefore, the MX would

issue has basically been left for the Congress to decide because the Bush Administration has continued to request funding for both the MX and Midgetman. This statement may be supported by Senate Majority Leader George Mitchell's statement:

I don't think there's any chance the administration's proposal to fund both (the MX and Midgetman) will be enacted.¹³³

Additionally, Rep. Aspin has reportedly supported the same position by expressing his doubts the administration will receive its two-missile program.¹³⁴ Of course, it must be mentioned that the most influential testimony on the ICBM issue may have been presented in February 1990 by three former chairmen of the Joint Chiefs of Staff. The three former chairmen were reportedly in support of cancelling plans to modernize the United States land-based nuclear missile force which included the MX and Midgetman if the United States and the Soviet Union reach a strategic weapons treaty.¹³⁵ In my opinion, the Congress has not reached agreement on the mobile ICBM issue because Congress does not totally support mobile ICBM systems being deployed in the countryside.

As far as the other two legs of the strategic nuclear Triad--sea-based and the strategic bombers, the debate has focused primarily on the

become a bargaining chip to get the Soviets to give up their comparable missile the SS-24.

¹³³H. Josef Hebert, "Cheney Opposed to Hasty Cutback in U.S. Weaponry", *The Monterey Herald*, 5 February 1990, p 1.

¹³⁴Robert C. Toth, "U.S. May Push Missile Ban at Arms Talks", *Los Angeles Times*, 31 March 1990, p 13.

¹³⁵H. Josef Hebert, "Cheney Opposed to Hasty Cutback in U.S. Weaponry", *The Monterey Herald*, 5 February 1990, p 1.

budget and what is affordable. The budget debate of these two legs are unlike the ICBM issue that is being debated for survivability and stability reasons. The reason for the affordability issue is that the weapon systems have either already been deployed operationally or the weapon system is in some phase of testing. Therefore, the budget issue is how many weapon systems of a particular component is bought. Presently, it appears that the sea-based leg of the strategic nuclear Triad is under the least scrutiny by the Congress. The sea-based component has been held as the model of the strategic nuclear modernization program and, with the successful deployment of the Trident II (D-5) missile in the spring of 1990, will most likely continue to be supported by the Congress. The final leg to be assessed by the Congress is the strategic bombers and the affordability of the B-2.

The B-2 issue of affordability will most likely be a compromise between the Bush Administration and Congress. The reason is that Congress has supported the negotiating position of favoring strategic bombers; therefore, the advertised technological improvement of the B-2 is being deemed essential to modernization of the Strategic Bomber force. Additionally, the B-2 program is not concentrated in one congressional district or state. Consequently, it is logical to believe that the support in Congress is more diversified and may be beneficial to the continued development of the B-2, even though at a lower quantity than originally requested. Of course, the other option for the bomber force would be the reopening of the B-1B production line, although it appears such as option is not being considered by the Congress. Ultimately for a

weapon system to make it to production, it is essential to have Congressional support.

In summary, the review of the previous four areas has led only to further substantiation that the Congress will decide the future strategic nuclear force structure of the United States, either directly through budget approval or by ratification of a START Treaty. Also, it appears that a START Treaty will be instrumental in the future of the United States' ICBM force, in particular the mobile systems. In my opinion, the lack of support by the Congress for either the MX or Midgetman mobile ICBM system since 1983 cannot be overlooked as an indicator of a possibly new strategic nuclear force structure on the horizon. From the Defense Policy Panel's conclusion in 1988, and the subsequent negotiating position of the United States, it appears that the congressional leadership has influenced the direction of the strategic nuclear force structure of the future.

B. INFLUENTIAL CONGRESSIONAL LEADERS ON DEFENSE ISSUES

A review of Congressional influence on the future strategic nuclear force structure of the United States would not be complete without discussing the impact of Congressional leadership concerning defense issues. Although it is recognized that individual Congressmen should not determine the future of strategic nuclear forces, the reality is that certain positions of leadership in Congress are afforded the opportunity to make such determinations. Consequently, for the purpose of this study, it has been essential to highlight two positions and the individuals that hold those positions in Congress.

Naturally, the positions of influence on defense matters are the chairmen of the Armed Services Committees in the Senate and the House of Representatives. As previously mentioned throughout this study, the current chairmen of these two committees (Sen. Nunn and Rep. Aspin) have been extremely influential in the mobile issue for ICBMs. Also, both chairmen have been advocating further changes in defense, ranging from an altered strategy to a revised defense budget. These two positions are not the only ones that will impact a future force structure. However for this section the statements of Sen. Nunn have been selected to highlight the possible influence of Congressional leadership on defense decisions relating to future strategic nuclear forces.

To understand the potential influence of Sen. Nunn on the future of defense, two speeches which he presented before the Senate in March 1990 should be analyzed. On March 22, 1990, Sen. Nunn addressed the Senate and provided the results of the Armed Services Committee's review of the Administration's FY 1991 Defense Budget and the Five Year Defense Plan. Sen. Nunn's assessment was that these reports contained at least five fundamental blanks which he labelled as: threat blank, strategy blank, dollar blank, force structure blank, and program blank.¹³⁶ From these five areas of concern by Sen. Nunn, it is easily understood that changes may be required in the budget request for FY 1991 and the Five Year

¹³⁶Sen. Sam Nunn, Chairman of the Senate Armed Services Committee, "Defense Budget Blanks", "Prepared Statement of Sen. Nunn Before the Senate", 22 March 1990, pp 1-2. For Sen. Nunn's detailed description of each blank, his speech should be reviewed in its entirety to understand his reasoning for selecting these five areas for review by DoD.

Defense Plan. It is my opinion that the overriding theme of this speech highlights the need for overall change in defense forces; therefore, it should be realized that all programs, including the strategic nuclear forces will be reevaluated.

The influence of the Congress and in particular, Sen. Nunn with regard to defense cannot be misunderstood from Sen Nunn's closing remarks as to the responsibility of his committee:

...the Armed Services Committee will meet our responsibilities to the Senate in the authorization process for national defense programs. In the absence of Administration decisions on major program and force structure issues, the Committee will rely on our own best judgements about the changes in the threat and our military strategy, and the implications of these changes for the future structure of our military forces in reaching decisions on the FY 1991 Defense Authorization Bill...I am constantly being asked for a bottom-line number. I don't know any logical way to arrive at such a figure without analyzing the threat; determining what changes in our strategy should be made in light of the changes in the threat; and then seeing what force structure and weapons programs we need to carry out this revised strategy. To decide on the size of the defense budget without first going through this process would be little better than pulling a number out of the air.¹³⁷

In my opinion, Sen. Nunn's remarks clearly state the essence of this review which is that Congress will be the deciding factor with regard to strategic nuclear forces, and their judgements will be based on testimonies and information presented before Congressional committees.

The second speech of Sen. Nunn on March 29, 1990 was specifically oriented to analyzing the changing environment and determining an up-to-date threat assessment. Of particular interest, Sen. Nunn utilized specific testimony from several experts on threat assessment and defense

¹³⁷Sen. Sam Nunn, Chairman of the Senate Armed Services Committee. 22 March 1990, pp 22-23.

issues that have been referred to earlier in the threat assessment chapter of this study.¹³⁸ In his closing remarks, Sen Nunn stated that an updated threat assessment was required for addressing the critical question of "how much is enough" to deter or defend against these threats and protect our security interests.¹³⁹ In giving his opinion of how the question should be answered, Sen. Nunn stated:

...we cannot simply take our lead from opinion polls. We cannot simply pick a number out of the air. Nor can we necessarily rely on past policies or historical precedents. There is no precedent for the collapse of Communism. Nor can we ask the American people to pay for a defense posture that is based on yesterday's threat. Our assessments must be based on today's realities and not yesterday's stereotypes...Our strategy must be revised to reflect the changed threat environment. We must then determine what forces and what level of defense spending are required to implement our revised strategy.¹⁴⁰

It is recognized that Sen. Nunn restated some opinions in both speeches, but the message and guidance from the chairman of the Senate Armed Services Committee in March 1990 was clear on the point that he wanted a new strategy with appropriate changes in force structure to meet the changing threat environment for the 1990s. Of course, the changes that

¹³⁸Sen. Sam Nunn, Chairman of the Senate Armed Services Committee, "The Changed Threat Environment of the 1990s", "Prepared Statement of Sen. Nunn Before the Senate", 29 March 1990. Sen. Nunn's speech covers the entire spectrum of threats in the world. With regards to the Soviet Strategic threat (see pp 11-14), he does recognize that the Soviets have continued their modernization of strategic forces, but also makes the point that changes in these forces have taken place such as cutbacks in Blackjack bomber production, cessation of Yankee-class SSBN patrols, and the halting of Bear-H bomber patrols to the north of Canada. In his comments on the Soviet strategic threat, Sen. Nunn utilizes several points from CIA Director Webster's testimony in January 1990.

¹³⁹Ibid., p 20.

¹⁴⁰Ibid., p 20.

are recommended must be affordable in an era of declining defense budgets. The speeches of Sen. Nunn are vital to an understanding of Congressional influence not only because these remarks are the opinion of one Congressional leader, but also their ramification most likely will be felt throughout the entire Department of Defense.

In summary, the impact of the opinions of Congressional leaders, which reflects the attitudes and opinions of the general public, cannot be disregarded or neglected. From this brief review of the opinions of one key leader, it may be possible to determine the overall influence which the Congressional leadership will have on the strategic nuclear forces for the future. It is recognized that the choice of Sen. Nunn may be viewed by some as biased in determining the views of Congressional leaders, but it must be realized that Sen Nunn's views and opinions are highly respected on defense issues. Additionally, it has not been the intention to promote one view, rather to indicate how one Congressional leader has used testimony to advance his thinking and opinions on defense issues. Therefore, it is important that Congressional testimony on defense issues be accurately presented and helpful for formulating the opinions of Congress on defense matters.

C. CONCLUSION

Congressional influence with regard to future strategic nuclear forces for the United States is a reality that strategic planners do not like to consider. In the changing international environment and fiscal realities, the strategic nuclear forces which are supported by Congress

and in particular, the Congressional leadership, will be the basis of the strategic nuclear force structure for the future. Additionally, it is advantageous to recognize that Congressional authority is not limited to budget decisions, but is influential throughout the spectrum of decision-making with regard to national security. As the review of the previous four factors indicated, the influence of Congress is ever-present and must be considered when assessing the future design of United States' strategic nuclear forces.

The Congressional factor is most readily acknowledged in President Bush's guidance on national security for working together with Congress. Additionally, this understanding of Congress' position on the mobile ICBMs for the strategic nuclear Triad has led the Bush Administration to delay making a choice. Rather, the choice appears to have been left for Congress. Conversely, the issue of the supporting the B-2 has been continued by the Bush Administration because the Congress has supported a favorable position for strategic bombers in a START Treaty. Of course, it is acknowledged that the current production level is much less than initially proposed, but the point is that Congress appears to support strategic bombers.

The Congressional influence over the negotiating position for a START Treaty is a major point of discussion. The position of Congress for negotiating the START Treaty has a two-fold purpose which appears to promote slow-flying bombers and to ban mobile systems from being developed by the United States. Congress has two methods to accomplish this goal:

first, not funding a mobile ICBM system for the United States; and second, not ratifying the START Treaty.

The START Treaty ratification would be of major consequence. However, it is my opinion the Bush Administration conducted its strategic review in 1989, then decided to delay a selection of a mobile ICBM because in actuality Congress does not want mobile ICBMs. Therefore, it would appear that the United States is leaning toward altering its strategic nuclear force structure from the Triad to what has been fashionably labelled a Dyad. This decision would be based on a Congressional decision, not a decision by the Bush Administration, which has continued to support the strategic nuclear Triad through declaratory statements.

The focal point of a Congressional decision on the strategic nuclear force will be the views of the Congressional leadership and in particular, the leaders responsible for defense matters. This study has concentrated on the two leaders of the Armed Services Committees and their opinions, especially with regard to the ICBM leg. Nonetheless, the opinions of the leadership in Congress will affect all areas of developing a national security strategy for the United States. This fact was made apparent by analyzing Sen. Nunn's speeches in March 1990. In my opinion, the final result is that the Congressional leadership's opinions must be formulated from accurate information on issues, or these leaders will pursue their own method of determining the Congress' position in areas such as threat assessment and weapon systems development.

Finally, it is imperative, as the Bush Administration has realized, to understand the influence of Congress and the importance of legislative

and executive cooperation. This does not mean Congress should be allowed all the decision-making power, but rather decisions should be reached through compromise. However, if compromise with regard to defense issues is not an option, it may be necessary to educate the Congress on the reasons for resolving an issue in a particular manner. Furthermore, educating Congress on requirements is a more prudent approach of salesmanship than trying to force an issue on the Congress. With this thought in mind, it may be advisable for the future strategic nuclear force structure of the United States to be reassessed. Of course, the conclusion of this reassessment should be recommendations for programs that are supportable and defensible before Congress.

VII. CONCLUSION

The central objective of this study has been to review and analyze five areas which may establish the policy and guidance criteria for future strategic nuclear force structure of the United States. From this review, it appears that the process of strategic decision-making with regard to the strategic nuclear force structure is not easily understood. Consequently, a determination of the future strategic nuclear force structure of the United States will most likely not be exclusively determined from a conventional view based on national interests and national strategy. Rather, the future strategic nuclear forces will probably be determined from a compilation of contributing factors.

In discussing the subject of strategic nuclear forces, the research of this paper has addressed what appears to have become the traditional categories of discussing the strategic nuclear forces: national interest, strategic threat, arms control, and the strategic modernization program. Also, it has become a reality that recognition of current and future fiscal constraints are required for any assessment to be accurate and credible with regard to designing force structures for DoD--this appears especially true for the strategic nuclear forces. While recognizing the possible impact of fiscal constraints, it has become apparent that Congress' power or influence is more wide-ranging than only the budget. With this in mind, the research of this paper was expanded to a more inclusive concept which this thesis has labelled "Congressional

influence". By encompassing the influence of Congress into one area of discussion, it appears from the evaluation of other areas that a prime determinant factor for a future strategic nuclear force structure will be the United States Congress.

In my opinion, the conclusions from the issues discussed in this study have provided an insight on Congressional influence being the most influential factor on strategic decision-making for the future strategic nuclear force structure of the United States. Therefore, the strategic nuclear force structure, whether Triad or Dyad, will be determined from Congress' impression of the issues. Congress will most likely decide on nuclear weapon systems which provide survivability and flexibility for meeting requirements in a changing international environment and a fiscally constrained budget. In my opinion, the programs and weapon systems that ultimately may become the structure of the strategic nuclear forces will require salesmanship to Congress by indicating a capability to meet a variety of future requirements not focused solely on strategic nuclear war.

A. SUMMARY

The design of this study was to extrapolate a logical approach to determining the future strategic nuclear force structure from the initial guidance of the President on national security strategy in conjunction with the new broad category of Congressional influence. As the conclusions on the issues have indicated, the influence of Congress in strategic decision-making is not limited to the issue of the budget, but

is in reality ever-present. Consequently, Congressional influence must be realized and programs presented with the perspective that Congress will ultimately decide the program's future. With this in mind, the purpose of the following summary is to highlight, in my opinion, Congress' influence in the future strategic nuclear forces of the United States.

First, President Bush set the stage in his acknowledgement of the requirement for his administration to work with the Congress on development of the national security of the United States. The point of working with the Congress has and most likely will be continued, since the Bush Administration has not proceeded with strategic programs that are in total contrast with expressed views of the Congressional leadership. This interpretation of the Bush Administration's policy toward strategic nuclear forces is best described with the decisions of the administration regarding mobile ICBMs and the B-2 program.

The most evident example of not pursuing a program that would place the Bush Administration at the opposite end of the spectrum with Congress is the decision on mobile ICBM systems. The Bush Administration's position has been to continue to support both the MX and Midgetman system, while understanding fully that only one system would be approved. It appears that the Bush Administration's strategy has been to let the Congress make the choice between the two systems or, maybe no choice at all. The option of no choice at all may be the policy, since it cannot be determined for certain whether the Congress supports any mobile ICBM system for the future.

On the other hand, a program that the Bush Administration has continued to support is continued production of the B-2. The difference is that Congress has supported a negotiating position which supports slow-flying bombers in the START Treaty; therefore, Congress is likely inclined to ultimately approve technological modernization of the strategic bombers. This methodology would lead one to believe that Congress will support the B-2, although reduction in the quantity produced will be required, because of fiscal constraints. It is my opinion that these two examples exemplify the overall acknowledgement by the Bush Administration of the influence of Congress and the intention of only proceeding with programs that Congress will ultimately approve.

Second, assessment of the strategic threat in the changing international environment of the 1990s remains essential. In assessing the strategic threat, this study concentrated on the Soviet Union, which is deemed as the only nation with the capability to destroy the United States. For evaluating the Soviet Union's strategic threat, two approaches were utilized. The first approach was based on analyzing the actual capabilities that the Soviet Union possesses. The analysis of this approach was centered on the statements of the Department of Defense, especially Secretary of Defense Dick Cheney. Secretary Cheney's position has continued to focus on the capabilities of the strategic nuclear forces of the Soviet Union, which are continually being modernized.

The second approach focused on the reality that changes have taken place in the Soviet Union and the Warsaw Pact. It is recognized that the changes have occurred under President Gorbachev, but from the testimony of

Director of Intelligence William Webster, it seems likely that even a Soviet leadership change would not permit the Soviets to reverse completely the reforms of President Gorbachev. Also, it must be believed that the testimony of former defense hard liners, such as Richard Perle in early 1990, has affected the assessment which Congress conducted in the early part of 1990. Mr. Perle's opinion has been that changes are taking place that will allow the United States the opportunity for assessment of force structure changes.

Also, the changing international environment with regard to nuclear and ballistic missile proliferation has been assessed for a method to defend against Third World proliferators. The most likely solution to the proliferation probably would be SDI. Of course, the issue of the ABM Treaty would arise, but the United States may be able to convince the Soviet Union that SDI is additionally in the Soviet Union's interests, since the majority of the proliferation is taking place close to Soviet borders. The overall benefit of SDI will be discussed with arms control.

Third, arms control and a START Treaty are portrayed as areas that can achieve two goals for the United States. The first goal of arms control is to limit weapon systems, particularly between the United States and the Soviet Union. It appears that the focal point of arms control for the 1990s is the START Treaty and the limitation of strategic nuclear weapons. By the very nature of limiting strategic weapons, a fundamental desire to lower the strategic nuclear weapon arsenals of the United States and the Soviet Union is achieved. It is believed that as strategic weapons are limited, the possibility of strategic nuclear war will also

diminish. The second goal is that by lowering the quantity of nuclear weapons, a budgetary benefit will be obtained. The potential benefit of deleting or reducing a strategic weapon system is usually interpreted in a positive manner by Congress.

Additionally, the START Treaty has been negotiated from the standpoint of supporting slow-flying strategic bombers and SLCMs, albeit not actually a part of the START Treaty. This position is supported by both the Bush Administration and the Congress. Of course, a negotiated treaty which represents the position of Congress has a better probability of being ratified. Also, Congressional endorsement of slow-flyers over fast-flying ballistic missiles will have a major impact on the strategic nuclear programs which are funded in the future.

Lastly, the issue of SDI has been removed from the START Treaty; therefore, SDI may proceed with two benefits in mind. The first benefit would be a cooperative effort with the Soviet Union against nuclear and ballistic missile proliferation. Also, an effort to involve the Soviet Union and remove their objections of possibly violating the ABM Treaty may be a viable reason for Congress to support the development and deployment of SDI. The second benefit is that the United States could move toward an offensive/defensive strategy with regard to strategic nuclear force structure. Ultimately, the final result would be a decrease in the United States' offensive strategic nuclear forces and possibly, the requirement for United States fast-flying ballistic missiles would cease to exist.

Fourth, the strategic modernization program has been under development since the early years of the Reagan Administration. The

intention of the program was to modernize all three legs of the United States strategic nuclear Triad. The focus of the discussion since the 1983 Scowcroft Commission's report has been the ICBM leg of the Triad. The controversial aspect of the ICBM leg has been the choice of a mobile system. The two mobile systems that have been proposed are the MX rail-mobile and Midgetman road-mobile. The MX has been supported by DoD and the Air Force, while the Midgetman has been supported by influential leaders in Congress, as well as General Scowcroft. With this split in opinion, neither the MX or Midgetman has been recognized as the designated mobile missile of choice for the future. It is my opinion a choice has not been made because of Congress' perception of the general public not supporting strategic nuclear weapons "running around" the countryside.

As far as the sea-based leg and the strategic bombers, the problem has not been a decision on the type of weapon system, but funding the program. The sea-based leg has continued to be funded with the successful Trident submarine program and the development and deployment of the Trident II (D-5) missile. With the success of that Navy program in the 1980s and early 1990, it appears that the sea-based leg will become the premier component of the strategic nuclear force structure for the United States. Also, it appears that the strategic bomber leg has retained its support, especially with the favorable counting rules of the START Treaty.

Additionally, it must be mentioned that the strategic bomber leg has been successful in deploying the B-1B during the strategic modernization program, as well as development and early tests flights on the B-2. Of course, the B-2 has encountered funding problems because of its price per

plane, but it appears that the B-2 will continue on to production. It is my opinion that the B-2 will proceed in development and production, but at a lower production quantity from original requests. The reasons for my opinion is that Congress has supported the negotiating position which favors strategic bombers in a START Treaty; therefore, it is logical to support the continued development of the technologically advanced B-2.

Fifth, Congressional influence must be considered, in my opinion, as the most important factor in determining the future strategic nuclear force structure of the United States. When reviewing the summary of the previous four factors, it must be recognized that Congress played an instrumental role. Congress is involved in coordinating the national security strategy of the United States with the President, assessing the strategic threat, ratifying treaties, and supporting strategic weapon systems. In reality, the strategic nuclear force structure of the United States is largely determined by the strategic decision-making of Congress. It is realized that this statement is contradictory to the traditional method of how strategic planning and decision-making should evolve. Nonetheless, as far as the future strategic nuclear forces of the United States is concerned, it is imperative to recognize the importance of Congressional influence, especially the Congressional leadership. Also, good salesmanship is increasingly essential when presenting a program for Congress. It must be realized that accurate information is vital, because the future of a strategic program could be determined by a single instance of inaccurate testimony before Congress.

In conclusion, it is my opinion from the evidence presented in this study, that Congress believes changes are taking place in the international environment which afford the United States the opportunity to reassess and possibly alter the strategic nuclear Triad. Additionally, a START Treaty will make it even more paramount that we look to the future and not continue to rely on thinking of past generations with regard to the future strategic nuclear force structure. Furthermore, from the Defense Policy Review in 1988 on strategic forces in a post-START era, it should be acknowledged that Congress has stressed the "key" capabilities required for future strategic nuclear forces are survivability and flexibility. Also, it must be remembered that the United States is still without a solidified position on the mobile ICBM issue. Ultimately, it is my opinion the mobile ICBM issue will be decided by Congress, or possibly Congress has already made its decision, which is no decision.

B. RECOMMENDATIONS

From this study, it is apparent that a new assessment of the capabilities of the future strategic nuclear force structure of the United States is required. The guidance may not be in writing, but the action or lack of action on the mobile ICBM issue by the Bush Administration and Congress is a leading indicator for a review on the strategic nuclear Triad. At the conclusion, the appropriate answer may be that the strategic Triad should remain as the strategic nuclear force structure. If the strategic nuclear force structure is to remain the Triad, it is readily apparent that the issue of selecting a mobile ICBM must be

decided. This necessity exists because the guidance of Congress is survivability and flexibility, plus the fiscal constraints of the Defense Budget will not economically permit two mobile ICBM systems.

It is my recommendation, however, that before the strategic nuclear Triad is determined to be the correct answer, the Department of Defense should reevaluate the issues that have been presented in this study. The determination may well be that the changing international environment requires a new strategic nuclear force structure for the 1990s and a post-START environment. Additionally, a new force structure may prove to be more flexible, survivable, feasible and capable than the current strategic nuclear Triad. Of course, proponents of the Triad will argue that three components are much more likely to achieve the requirements than a force based on the Dyad concept. In the end, this may be true, but the real essence is that it is time for DoD to reassess new options.

It must be remembered that the research of this study has focused on the policy aspect and not the technology aspect of determining a future strategic nuclear force structure. With this in mind, it is opinion that DoD should provide guidance to the Air Force and the Navy to conduct reassessments of the capabilities and provide recommendations on a new strategic nuclear force structure. The guidance should advise the two services to take into account the reality of a declining Defense Budget and then answer the question: if our current funding continues downward, would it not be possibly more stable to have a Dyad fully modernized than a Triad that is obsolete and unaffordable?

To answer this question, it appears to me that several options for improving the strategic nuclear forces should be assessed. These options will need to meet the requirement of conducting a wide-range of strategic nuclear missions, and yet must be conducive to being sold favorably to Congress. It is my opinion that some of the options assessed should be:

a. The continued support of a strong sea-based leg concentrated on the Trident SSBN and the D-5 missile. Also, the possibility of the Trident submarine as becoming a dual- or multi-capable platform should be analyzed. The increase of mission capability beyond the strategic nuclear mission could be in the area of a launch platform for satellites or as a Tomahawk platform for the future. In my opinion, the concept of being capable to conduct operations other than strategic nuclear war, which from this study has been determined to be decreasing, warrants innovative ideas for future employment of the Trident SSBN in addition to its strategic nuclear mission. Also, this approach may be an avenue to keep selling the sea-based leg of the strategic nuclear force to the Congress as the Defense Budget declines.

b. With the favorable counting rules for strategic bombers in a START Treaty, the strategic bomber leg will be continually modernized through technological advancements. At the forefront of the current technological breakthroughs is the stealth technology; therefore, the B-2 is a necessity. To help acquire support for the B-2, the B-2 should be promoted through salesmanship of being capable of both strategic and conventional weapon delivery. It is recognized that this selling point has been utilized, but it is my opinion that the dual-capability is vital to the survival of the B-2. Also, it must be recommended that if the B-2 should not be supported in the future, then the production of B-1Bs should be resumed. The flexibility of strategic bombers in the changing international environment requires the technological advancement of the strategic bomber leg.

c. The development and deployment of SDI appears to be an option for decreasing the threat from strategic offensive weapons. SDI would possibly allow the United States to shift its nuclear strategy from strictly offensive to an offensive/defensive strategy. Additionally, SDI should be sold to Congress as a hedge against a Third World nuclear attack or the accidental launch of a nuclear ballistic missile.

These recommendations may not be feasible, but the point to be made is that exploration of new concepts are required for the future strategic

nuclear forces of the United States. It appears that the opportunity for DoD to conduct a reassessment is on the horizon. With this reassessment and the resultant recommendations, the salesmanship of the strategic forces must be in agreement with the thinking of the Congress. Remember, it is not the intention of this study to promote altering the Triad, but rather it is necessary to reassess our requirements and ensure the appropriate strategic nuclear forces are procured for maintaining the national security of the United States. Consequent realities of those decisions will determine whether the United States retains its strategic nuclear Triad, or shifts increasingly toward a Dyad.

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